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Educational News and Editorial Comment

THE HIGH-SCHOOL REPEATER

Assistant Superintendent Thomas R. Cole of Seattle, Washington, supplied the *School Review* with the following statement:

The article by Dr. Judd in the February number of the *School Review* calling attention to the problem confronting the secondary schools is most timely.

The high schools have been growing by leaps and bounds, and the cost has become a real burden in many communities. In Seattle, for example, during the year 1919-20 the high-school enrolment increased over eleven hundred. During the present year 1920-21 the growth has been equally as large, while there has been no increase in the number of pupils over the previous year in the elementary schools. Twenty-one per cent of all the pupils in the Seattle schools today are attending the high schools. The graduating classes this year will number over thirteen hundred. The per capita cost of educating over eight thousand high-school boys and girls last year was \$143.00.

These figures are most encouraging from the standpoint of the interest taken in secondary-school education, and the city stands ready to erect new schools, one a year if necessary, to accommodate the rapidly growing attendance. We have come to the conclusion, however, that it is time to consider the advisability of carrying in the high schools from semester to semester students who are continual repeaters. With this point in mind, the Board of Education at a recent meeting adopted the following rule:

"A student who does not pass in at least three subjects, in addition to the required work in gymnasium, during any semester in high school, will be

placed on probation at the beginning of the following semester, notice to the parent or guardian being given simultaneously. Failure to maintain a passing grade in three subjects during the probation semester shall cause him to be dropped from school at any regular report time during the semester, or at the close of the semester, provided the parent or guardian has been duly warned. The time of dropping a pupil, whether it be at any regular report time period or at the end of the semester, shall be left optional with the principal.

"A pupil dropped from school on account of poor work will not be reinstated before one semester has elapsed after the close of the semester in which he was dropped.

"Exceptions may be made to the rule in case of illness or of part-time attendance.

"Students at this present date who have failed to pass in three subjects during the past two semesters or more shall be placed on probation immediately, with the understanding that they will be dropped at the end of this semester, unless they meet the requirement to pass in three subjects."

The teachers have heartily welcomed the scholarship ruling. It is not the wish of the principals to eliminate pupils from school, but rather to have them understand that high-school attendance is a privilege and that pupils who accept this privilege should do so with the intention of putting forth a worthy effort.

YALE ENTRANCE EXAMINATIONS

Yale has gone a step farther in reducing the number of examinations which must be passed by candidates for admission than has any other of the "eastern" or "examining" colleges. The statement issued by the chairman of the Committee on Admissions is as follows:

Upon the recommendation of his principal or head master a candidate whose school record shows that he has completed with certificate grades in an accredited secondary school a four-year course covering the subjects required may gain admission to college by passing examinations in those four subjects in the following list which most nearly correspond with the work of the regular school curriculum for the senior year: English (comprehensive) and three of the following: Greek, history, Latin, mathematics, modern language, and science.

The examination system was necessary at one time when boys prepared for the most part under the guidance of tutors, for in those days there were no well-standardized high schools. The examination has become in modern times a relatively clumsy device for adjusting the student's institutional relations. The subjects taught in high school have increased in number, and the

legitimate methods of teaching these subjects have multiplied to the point where it is distinctly unwise for any college staff to attempt to dictate the exact work which shall be done in preparing for a higher education. There are other ways of finding out about a student's preparation which are less likely to fall into error and commit injustice. Yale has doubtless been brought to a realization of these facts both by her own experience and by observation of the success of the certificating system which is in common practice west of the Allegheny Mountains. It is to be hoped that the example which is thus wisely set will attract the attention of other institutions along the Atlantic seaboard.

FIRST AID AND PHYSIOLOGY

During the war the women of a great many communities became interested in the methods of administering first aid, and classes were conducted by agents of the Red Cross and by local physicians. The war-time interest has left here and there its traces in peace-time practices. One of these is to be found in the Community High School of Carlinville, Illinois, where one of the teachers, Miss B. Eva Hoehn, has organized a first-aid course as laboratory work in physiology. The course is taught twice a week in laboratory periods of ninety minutes. The supplies for the course are obtained from the American Red Cross or made by the students as directed in the Red Cross text and the *Advanced First-Aid Instruction for Miners*, which is supplied by the Bureau of Mines, Washington, D.C.

Some idea of the content of the course can be gained from the following descriptions of a number of lessons selected from Miss Hoehn's syllabus:

LESSON I: Relation of first-aid to doctor; characteristics of good first-aid; safe delivery to doctor; shock, meaning; treatment; stimulants, use and abuse; folding of triangular bandage; tying of reef knot.

LESSON II: Bandages, kinds and uses; characteristics of good and poor bandaging; application of triangular, roller, and four-tailed bandages and compress; practice in bandaging forehead, eye, jaw, and top of head with triangular bandage.

LESSON VI: Continued study of skeleton; relation of muscles and bones in fractures and dislocations; injuries in which skin is not broken: bruises, strains, sprains, dislocations, simple fractures, and treatment in each case.

LESSON VIII: Review reducing and padding dislocations; nature and kinds of fractures; symptoms of fractures; dangers in compound fractures; careless handling of simple fractures; improvised splints; practice in splinting fractures of upper arm and forearm.

LESSON XIV: Skin a protective covering; wound defined; pus germ and blood poisoning; kinds of wounds; meaning of clean dressing; treatment of wounds; practice in handling compress; dressing wounds of forehead, temple, ear, and palm; opening folder gauze and applying to shoulder, chest, and shoulder-blade; compound fractures of hand and wrist.

LESSON XV: Discussion of relative value of bichloride of mercury, carbolic acid, peroxide, and iodine as disinfectants; location of points of pressure in stopping bleeding: carotid, temporal, occipital, subclavian, axillary, brachial, femoral, popliteal.

LESSON XVII: Study of circulatory system: symptoms of arterial, venous, and capillary bleeding; meaning of hemorrhage; practice in making tourniquets and application; problems in arterial bleeding in various parts of body requiring stopping hemorrhage and dressing wound.

LESSON XIX: Burns of various kinds; treatments; fire prevention and methods of rescuing; sunstrokes; heat exhaustion; frost bites; freezing: symptoms and treatment; practice in treating and bandaging all body burns.

LESSON XXII: Discussion of prevention of drowning; rescuing and treatment; discussion and practice in electric shocks.

LESSON XXV: Poisons: classes, symptoms of each class, treatment of each; practice in assisting patient in walking; carrying by one carrier, three ways; carrying by two carriers, five ways; by three carriers, two ways.

INVESTIGATION OF CLASSICAL EDUCATION

The following statement is issued by Dean West of Princeton University:

I am authorized to announce that the General Education Board has appropriated \$60,000 to provide for an investigation of classical education in the secondary schools of the United States. The investigation will be conducted by the American Classical League and will probably require three years for its completion. It will be in the general charge of an advisory committee, with the co-operation of eight regional committees for the following districts: New England, Middle states, the South, Central West, Southwest, Northwest, Rocky Mountain states, Pacific Coast. When the work has been definitely mapped out, three expert investigators will be appointed. The advisory committee will ordinarily meet alternately in New York and Chicago. The regional committees will meet at such places as may be hereafter arranged. The co-operation of the regional committees is a necessary and most important part of the plan. The investigation will have three stages: first, finding the actual facts, so that the existing situation may be clearly known; second,

analysis and criticism of these ascertained facts; third, and most important, preparation of a progressive constructive plan for the teaching of classics in the secondary schools of the United States. The timeliness and importance of such an investigation need no comment. At the end of the work a full report will be prepared and published.

The expert investigators are not yet appointed, but several names are already under consideration. Advisers in other subjects, such as English, modern languages, and history, may be specially appointed later. The regional committees are in process of formation. The advisory committee is almost completed and is constituted as follows: Andrew F. West, Princeton University, chairman; A. L. Bondurant, University of Mississippi; W. L. Carr, Oberlin College; Roy Flickinger, Northwestern University; Mason D. Gray, East High School, Rochester, N.Y.; Richard M. Gummere, Penn Charter School, Philadelphia; Gonzalez Lodge, Teachers College, Columbia University; W. V. McDuffee, Central High School, Springfield, Mass.; F. J. Miller, University of Chicago; Henry Pennypacker, formerly of Boston Latin School and now of Harvard University; Frances E. Sabin, University of Wisconsin; Julius Sachs, New York City; A. T. Walker, University of Kansas; Samuel Webb, Jr., Bellbuckle School, Bellbuckle, Tenn.

STUDENT SELF-GOVERNMENT

There have been a great many experiments in student self-government. The cases in which the experiment has been abandoned ought to be described by some careful investigator who will look up the causes of failure. Probably most of these unsatisfactory experiments can be explained by the fact that teachers and principals have not always recognized that high-school students cannot assume responsibility for their own conduct except after a long course of carefully controlled practice. As long as self-government is treated as a part of the educational machinery of the school and is properly supervised it inspires the largest interest and loyalty on the part of students. As soon as the educational help of the principal and teachers is withdrawn and the system is allowed to go its own course, it is likely to fail.

The following description of a new example of the school city is quoted from the *Educational News Bulletin* of the state of Wisconsin:

Some years ago the "School Republic" plan of government attained a wide popularity and achieved remarkable results, but it never seems to have been popular in Wisconsin. This is to be regretted, for never was the country

so in need of real leaders to lead our good citizens in everything that is for the public good, and to educate the other citizens to be good.

In an attempt to give this plan of student self-government a thorough trial Principal Chester W. Collman has introduced this School Republic at Palmyra in the high school and grammar room, which are both on the same floor. The results have been all that could be expected and more. The system not only gives the pupils a wonderful training in character development, but shows the actual working of the laws and principles they have studied from a distance in the civics class. They see before their eyes the weaknesses of human nature and the dangers that beset every form of government no matter how nearly perfect it may be.

The plan operates under the name "School City," and it is planned in every respect like a typical American city. The principal acts as a board of appeals, also city manager, and his consent is necessary to validate every act of the city. All students who voted in favor of the plan are citizens and members of the Common Council which meets once a week to make necessary laws, thus affording the pupils real practice in parliamentary law, not just make-believe practice as is usually necessarily the case. A president of the council, a girl last semester, who was reelected this semester, presides. The mayor, city clerk, and city treasurer have the usual duties of such officers.

Naturally the most important officer is the chief of police, who is appointed by the fire and police commissions, who in turn are appointed by the mayor. The chief has exclusive charge of all discipline, or rather, of the public welfare, and appoints policemen, who, subject to his orders only, keep order and arrest wrongdoers. Police court is held in the office right after school as often as necessary, and habitual offenders, or those having committed a serious misdemeanor, are held for trial by the Superior Court of three, who are elected by the Common Council and hold trials once a week or oftener, if necessary, following all the usual forms, so far as this is possible. Practicing attorneys to defend the accused, or to give legal advice, are licensed by the city manager (principal) only.

The system has worked out splendidly so far. Although new problems are arising continually the school would not think of giving up this thoroughly democratic and educational system of school government in order to return to the old, more autocratic, system of teacher government.

CONSOLIDATED OR UNION HIGH SCHOOLS

While high-school attendance has been rapidly increasing in recent years in American cities, it is perhaps true that the most impressive expansion of high schools has taken place in those rural districts which have erected such schools through the co-operation of several school districts.

The following description of the work of one of these union schools in Ontario, California, was supplied at the request of the editors of the *School Review* by the principal, Mr. Merton E. Hill:

We have at present a union high-school district including nine elementary-school districts. Two of these are small city districts of about 10,000 population, the remaining seven are rural in nature, having a varied agricultural population. To the south the farmers are interested in dairying; the farmers to the south and east in the production of deciduous fruits, particularly apricots and peaches; to the east we have thousands of acres set out in grapes, particularly wine grapes; to the north and to the northeast the farmers are concerned exclusively with citrus production. Our district is about fifteen miles in length by about fifteen miles in width.

While we have a union high-school district, each separate grammar-school district has a board of three members, so you can readily see that I am dealing with nine boards in addition to our High School Board of five members. We formed two years ago an Association of School Trustees. This organization has been of very great use to the high-school district. We have about four meetings a year and talk over our educational matters. We have the very closest co-operation between the high school and elementary school.

It has been a notorious fact that the rural schools of our country have been neglected and that the children in these schools have not had as good advantages as the children of the city districts. We have attempted, through the high school, to bring additional opportunities to the children of the rural districts. During the last two years our high school has provided instruction in the elementary schools in music, drawing, domestic science, manual training, and boy-scout organization, and during the last year we have provided teachers of Spanish for the seventh and eighth grades. For several years the high school has paid the salary providing a boy-scout commissioner who has organized over five hundred boys in scout patrols. Commencing next year we shall give the same subsidy for a worker among the girls and will organize in all the districts the girl-scout patrols.

One of the most interesting factors of our work has been the night school. We established a night school at our high school but, of course, it was evident that we were not serving the people in the rural districts, and so a year ago we established branch evening high schools and sent our teachers out into the rural communities and organized classes. At the present time we have night classes covering all types of work at the Chaffey Union High School, the Tenth and Twelfth Street schools in Upland, the Alta Loma School, the Etiwanda School, the Cucamonga School, and on one of the big ranches at Cucamonga. In all of our evening high schools we have enrolled over nine hundred people, mostly adults. During the present year our enrolment in the day school has been about eleven hundred; you can see that we cover a very good proportion of our territory in an educational way.

In addition to these branch evening high schools, our institution is offering special courses for adults in the day school. We have organized classes in millinery, sewing, and cooking for the women and send our instructors to various portions of the district regularly. We have employed in our agricultural department experts who spend a portion of their time giving instruction in the classroom and the balance of their time out on the farms consulting with the farmers and helping them. Each year we give short courses for the farmers. This year we had about two hundred and fifty farmers enrolled in short courses in deciduous fruits, citriculture, and farm mechanics. Farmers come to the institution from all portions of this section for these short courses. The school, through its agriculture department, is carrying on demonstration farms. We have ten acres in citrus fruits, a twenty-acre dairy farm, and a sixty-acre deciduous fruit farm.

RURAL HIGH SCHOOLS AND TRANSPORTATION

Another phase of the organization of the union rural high school is discussed in a prospectus published by the high school of the Jordan District, Salt Lake County, Utah. The following paragraphs are quoted from the prospectus:

Under consolidation, transportation is, of necessity, one of the big problems. In many parts of the United States it is regarded, by patrons particularly, as the insurmountable obstacle to consolidation. The difficulties are not, however, insuperable.

When consolidation was first effected in Jordan, a transportation fee of five cents per mile above the three-mile limit was allowed students, and they furnished their own means of travel. Some came on horseback, some in private buggies and other vehicles, and occasionally groups would unite in securing a large horse-drawn wagon which would accommodate from twenty-five to thirty students. The building now used as our farm mechanics shop was originally a barn in which the students' horses were safely housed during the day.

Today, all transportation is furnished free. Thirteen bus loads were brought to the high school each morning during the past year, and each pupil was under the parental roof at night.

In all, about 420 out of the total attendance of 548 were transported in auto busses. The students from Midvale, about sixty in number, were given transportation on the electric car line, and those from Sandy and within a radius of two or two and a half miles, are, of course, within walking distance.

Consolidation has assisted very materially in securing good roads throughout the district. This will be true wherever the system is adopted, and from this standpoint alone consolidation is a progressive system and should be encouraged. No one now claims that it is a cheap system of organization

and management, but it is efficient, bringing liberal returns to the students in advantages too numerous to mention here.

As to the success of our present method of transportation, there is no longer any question. The students are on the way but a short time either coming or going; they are comfortable, safe, and happy, and it is a rare occurrence that a bus is late. The cost of transportation is reduced to a minimum, being practically two cents per mile per student, and a high degree of safety and comfort is secured.

Free transportation in Jordan District is not confined to high-school students alone. Twenty vans were used last year in which to transport grade pupils to and from school. This enables us to bring together large enough groups of school children to grade all our schools except one. The pupils of the district, both grade and high school, thus enjoy practically all the advantages of the city and the country combined. Through consolidation, the strictly rural school has been eliminated in Jordan District.

AGRICULTURE IN URBAN HIGH SCHOOLS

The following statement is quoted from the *New York Evening Post*:

It seems like one more instance of "turning the tables" to find city boys learning to plough and sow, yet the idea has been found practical in the Newtown High School, one of the New York City high schools, and will probably spread rapidly to others, according to high-school officials.

There is no question of the need and popularity of agriculture as a part of the regular high-school instruction, provided the minimum requirement as to teachers, equipment, and incidental expenses can be met, says the latest report on high schools. "In the spring of 1919, as a result of the farm service rendered by boys during the war, a course of study was drawn up, adopted by the Board of Superintendents, and put into effect in the Newtown High School in September of that year. The course has been popular from the beginning, and twenty boys are now taking it. Due to a cut in the budget, however, it has not been possible to comply with all state and federal requirements, and the school has been deprived of the travelling expenses of a teacher during the six months of supervised agriculture practice.

Dr. William L. Ettinger, superintendent of schools, also believes there is a real call for agriculture courses, both in suburban and city schools, particularly where the schools are located in open sections. "The testimony which has been given in favor of our farm service for boys in the last two years seems to indicate that there is a growing demand for some kind of agricultural training for city boys," he says in a recommendation to Associate Superintendent Meleney. "These boys have made good on farms with little or no training, have sustained themselves admirably in their regular school work on returning to school, and a number of them are looking forward to agriculture as a life work.

"If no further evidence were available than the fact that more than 90 per cent of the students attending the Farmingdale State School of Agriculture are from New York City, the need of agricultural instruction in the schools would be obvious.

"The course would work something like this," Dr. Ettinger continues, "The first year the students would enter with the rest of the students. Their academic work would be so intensified that they would be ready to go to the land about May 1. The agricultural teacher will go with them and supervise and instruct them, and act as their guardian until November 1. Then they will come back to school and go through with the other years of the course in the same schedule. It is possible that enough work would be available in the vicinity of the school so that they would not be away from home the first year and need not necessarily be taken out of school so early. Local conditions would have to determine the problem of the first year."

Frank A. Rexford, supervisor of farm service and agricultural instruction, at the request of the superintendent of schools, last year took part in a state conference on high-school agricultural courses for city schools, at which a four-year course was approved for all city high schools in New York state interested in organizing them.

DEFINING SCHOOL GRADES

Various systems have been described in earlier issues of the *School Review* for defining more completely to students and teachers the meaning of school grades. The faculty of the high school of Kearney, Nebraska, has worked out a plan which is described in the following bulletin:

A. Purposes of this grading system:

1. To give teachers uniform ideas of the meaning of grades
2. To accomplish a tendency toward more uniform grading
3. To give the teacher a basis for defending the grades he records
4. To familiarize the pupils with required standards

B. Means of accomplishing these purposes:

1. By defining as objectively as possible the grades by groups

Group 1:

- a) Quality of work—95 to 100 per cent perfect
- b) Quantity of work—much more than minimum
- c) Co-operative leadership within class group unusually effective
- d) Effort and progress very superior
- e) Unfailing initiative in new work—very little help from teacher

Group 2:

- a) Quality of work—89 to 94 per cent perfect
- b) Quantity of work—more than minimum
- c) Co-operative leadership within class group effective
- d) Effort and progress very good
- e) Initiative in taking up work—little help from teacher

Group 3:

- a) Quality of work—81 to 88 per cent perfect
- b) Quantity of work—minimum requirement
- c) Effort and progress satisfactory
- d) Gets help when needed—responds willingly to teachers' requests

Group 4:

- a) Quality of work—75 to 80 per cent perfect
- b) Quantity of work—minimum requirement
- c) Effort and progress not wholly satisfactory
- d) Requires much help—much encouragement from teacher

Group 5:

- a) Quality of work—below 75 per cent perfect
- b) Quantity of work less than minimum
- c) Attention unsatisfactory—progress poor

NOTE.—The teacher should keep these definitions not only in his own mind but also in the minds of the pupils.

2. By describing a curve of normal frequency

Group	Grades	Junior and Senior	Freshman and Sophomore
1.....	95-100	5	2
2.....	89- 94	20	18
3.....	81- 88	55	50
4.....	75- 80	18	25
5.....	Below 75	2	5

NOTE.—The curve of normal frequency is a very important factor in this grading system. The teachers are expected to pay to it a proper respect. It is not intended to take away the individuality of the teacher. A teacher will be expected to justify his variation from the curve of normal frequency in the distribution of his grades.

C. To reimpress the grading system upon the pupils:

The teacher shall

1. Advertise the names of all pupils with a first-semester grade in any subject in groups 1 and 2
2. Advertise the names of all pupils with a term grade in any subject in groups 1 and 2

The principal shall

1. Advertise the names of all pupils whose semester grades are in groups 1 and 2
2. Have printed and posted in each room cards showing the definitions of grades

A SCORE CARD FOR RATING TEACHERS

A new contribution to the discussion of how teachers shall be scored is made by Superintendent M. G. Clark of Sioux City,

Iowa, who has prepared a "Point Scale" which gives weighted values to "five standard functions." The following is the table of weights for the five functions:

	Points
1. Basic teaching abilities.....	18
2. Class achievements.....	30
3. Moral and social influence.....	24
4. The school unity.....	16
5. Suggestions.....	12
Total.....	100

The scale is used in classifying teachers as follows:

1. A teacher who earns 69 or less points is necessarily poor. She should change her occupation in justice to her children.
2. A teacher who earns 70 to 74 is only fair. She should seek honest advice as to her future work.
3. A teacher who earns 75 to 79 is good. She evidently needs to give conscious, honest attention to herself and to her better training.
4. A teacher who earns 80 to 92 is in the great medium strong class. If she really belongs there, she will grow from year to year in her rank.
5. The few who earn 93 or better are truly superior. Few teachers would so rate themselves.

The definitions of the fundamental qualities required by this scale cannot be quoted in full, but, as a sample, we may quote the items which make up the function "class achievements," to which the greatest weight is given.

CLASS ACHIEVEMENTS

After all, one's professional success must be measured by the product of one's work. How does a class compare, at the end of a semester, with the same class, at the beginning of the semester? To what extent is the class bettered by the teacher contact? This is the teaching influence that remains after the class has passed on. It is through this element that the teacher continues to live.

1. *Class success.*—With the given environment, has the teacher secured the general results that should be expected for the semester or the year? This is where the "pupils' tests" really measure the teacher. Has she a tendency to excuse herself, or not to hold herself responsible if desired results are not obtained?

2. *Ideals of education.*—Is the class satisfied to "just pass"? Are their eyes fixed upon the minimum, or have they hitched their wagons to an educational star? How does their scholarship ideal rank with their athletic or sport ideal; with their pleasure ideal; with their money-getting ideal?

3. Are the children growing in intelligent habits of study?

4. Do the pupils show marked individuality, initiative, ability as problem-solvers, or are they mere textbook reciters?

5. Does the class show evidences of growing ability in thinking, reasoning, and correct judgments?

6. Are the pupils growing in their ability to use habitually correct English?

The assumptions which are wrapped up in this series of definitions are crucial to any system of teacher-rating. Just in so far as they represent agreement among school officers will the scale serve the purpose which its author describes as follows:

The purpose of this standard is to be helpful to the teachers. It is intended to be constructive, not destructive. It is intended to create confidence between teachers and their principals and supervisors, rather than distrust and antagonisms. It is hoped, therefore, that it will culminate in morale and higher standards.

NEWS ITEMS FROM SECONDARY SCHOOLS

A NEW TYPE OF EXAMINATIONS IN ENGLISH

Springfield High School, Springfield, Illinois.—A new type of examination has been carried on through three years by the entire English department. The three chief purposes are to test the comparative progress of pupils in various sections grouped according to ability, to keep certain common objectives before the entire department, and to give teachers an opportunity to compare the results of their instruction.

Examinations are made to conform to eight standards: (1) No question is to be merely a memory test. (2) Knowledge acquired in one field is to be applied in another. For example, a class that had been studying Burns's poems was asked to write an expository theme that should develop by examples Burns's patriotism. (3) One question in each examination should require pupils to organize their information. A class studying *Macbeth* was directed: Shakespeare's heroes are never weaklings, but each is unfit at some point and is a specialist at other points; show how this is true of *Macbeth*. (4) One question should test a pupil's power of expression. (5) One should test his judgment. A class which had been reading "The Bunker Hill Oration" was given this problem: A large sum of money was expended on the O'Connor monument to Lincoln erected on the statehouse grounds in our city in 1918.

From your reading of "The Bunker Hill Oration" what do you think Webster, had he given the address dedicating the monument to Lincoln, would have replied to one who objected that this was a waste of public funds? (6) A question in literature should attempt to test artistic appreciation. Here are a few specimens of our attempts. Point out five claims that may be made for beauty in Bryant's poems and illustrate each. Quote a stanza from Burns that appeals to you because of its melody. Put these lines from the *Odyssey* into the proper form for blank verse: "Now that we all to our content have shared the feast and heard the harp, whose notes so well suit with a liberal banquet, let us forth and try our skill in games, that this our guest returning to his country, may relate how in the boxing and the wrestling match, in leaping and in running, we excel." (7) A question needs to be included which will test the pupils' speed and comprehension in sight reading of material paralleling the literature they have been reading. (8) Another question should test pupils' gain in vocabulary. Upon this last problem we are just beginning our experiments.

Classes in each half-year, with the exception of special classes, are given examination questions which are practically identical for all ability groups. In preparing the questions teachers are placed in committees of two, each preparing one set, making several parallels, in order that the slightly varying instruction in different groups may be considered. All sets of questions are submitted to the chairman of the department. The percentage of credit allowed for each type of question is decided by the teachers in consultation.

No teacher marks the papers of her own pupils. Two grades are given each paper, one for the value of the content, and one for the degree of correctness in the mechanics of writing and composition. A common scale, based upon the minimum essentials used in our school, is used in determining the second grade. Results are tabulated on one large chart, showing comparison of classes and of the results of each teacher's work with that of her colleagues. Each group is ranked as having a certain number of pupils at the median, below the median, and above the median for the class, in content, in mechanical correctness, in speed, and in comprehension in sight-reading.

SUSAN E. WILCOX

News Items from the School of Education of the University of Chicago

METHODS COURSES FOR HIGH-SCHOOL TEACHERS

With the reorganization of high-school courses of study, the introduction of the junior high school, and the recognition of individual differences, there has come a demand for better methods of teaching. The needs of high-school teachers have been amply provided for in the program of courses which will be given in the School of Education of the University of Chicago this summer. Brief statements concerning some of these courses follow.

History.—"The Organization of Junior High School History for Teaching Purposes" emphasizes the selection, organization, and standardization of historical material for junior high schools. "The Technique of History Teaching in Junior High Schools" discusses general and special methods of teaching history, dramatization, teaching pupils to study, and the correlation of history with geography and English. "The Technique of High-School History Teaching" emphasizes a wide range of practical problems relative to the teaching of high-school history. "The Teaching of Community Life and the New Civics in Junior and Senior High Schools" discusses the aims, selection, and organization of material, and the methods of teaching this important subject. Special effort is made to present the subject so as to enable teachers to adapt work to the needs of their own communities.

English.—"The Teaching of Composition in High Schools" emphasizes the problems of teaching composition in the seventh, eighth, and ninth grades. "The Problems of English in Secondary Schools" includes a survey of important problems in the teaching of composition and literature. It emphasizes the problems of testing, ability grouping, differentiating instruction, correlating English with other subjects, and recent innovations in content and in methods. "The Teaching of English in Junior High Schools"

discusses the organization of a course of study involving guidance in silent reading, individualization of instruction, the correlation of English with other subjects, socializing the recitation, and the use of objective measurements. "The Teaching of Literature in High Schools" deals with the concrete problems in this field. Each topic will be definitely illustrated by means of examples taken from books read in high schools.

Mathematics.—"Mathematics for Junior High Schools" considers desirable modifications in existing courses and methods for the seventh, eighth, and ninth grades. "The Teaching of Secondary Mathematics" discusses the aims, organization, and methods of teaching mathematics. Recent tendencies will be emphasized. "The History of Mathematics" traces the ideas which have dominated mathematical thinking and teaching and have resulted in reformative and progressive movements in mathematical education.

Science.—"The Teaching of General Science" discusses the essential problems underlying the organization and teaching of general science. Why should science be taught to twelve-year-old boys and girls? What are appropriate criteria of selection and organization of subject-matter? How should general science be taught? "Biology in Secondary Schools" discusses recent developments in the teaching of the biological sciences. In addition to the usual topics of such a course special instruction is given in the demonstration of, and practice in, handling cameras, photographic work, making lantern slides, and the use of the projection apparatus. "The Teaching of High-School Chemistry" discusses the content and methods of teaching the subject in order to contribute most largely to the solution of practical problems of daily life and to give training for more advanced work in chemistry.

Foreign languages.—The following titles suggest the opportunities which have been provided for teachers of foreign languages: "The Teaching of Latin in High Schools," "Problems of Teaching French," and "Problems of Teaching Spanish."

Commercial subjects.—The School of Commerce and Administration has made provision for teachers interested in the "Teaching of High-School Economics," the "High-School Curriculum in Commercial Subjects," "Methods of Teaching Stenography and Typewriting," and other courses dealing with subject-matter.

THE DUTIES OF HIGH-SCHOOL PRINCIPALS

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Just how does a high-school principal justify his title and salary? Just what should he do to merit the full confidence and approval of his employer—the taxpaying public? Is he indispensable to a school system? Is his job one that any individual with fair intelligence can fill? Does he need special training for his office, or is it possible that whatever attributes he may require will transfer automatically from the fields of experience in which he has previously worked? What, in short, are the true functions of a high-school principal and how shall he exercise them?

These questions have recently become matters of serious consideration by more than one group of social reformers. College professors of education, in particular, have been excessively busy with the subject. Not a few superintendents and board members, aware of the problem, have taken cognizance of its significance. It has even been hinted that an occasional principal has looked his official self full in the face and acknowledged that the inquiry into his *raison d'être* has been both pertinent and desirable.

Clearly the organization and administration of a school should be determined by its aims. Today secondary education is coming more and more to be defined as that education of a general and prevocational sort which is suitable for youths in the early years of adolescence and which ministers directly to their "important immediate" and "assured future" needs, whether the period covered extends over two, four, or six years, and whether it concerns youths of twelve, fourteen, sixteen, or more years of age. To discover and to provide for individual differences and simultaneously to furnish an integrating training that shall make all pupils worthy members of society and of the body politic—these are coming to be the recognized ends of the secondary school.

High-school administration is, therefore, simply a method of procedure designed to realize these ends. In order that these ideals may be actualized, society is accustomed to select an individual, endow him with large discretionary powers, place him in charge of the school, and style him "principal." By the very meaning of his title he is chief, director, leader, supervisor. His task is to formulate policies, suggest modes of procedure for executing them, lead his assistants into new realms of thought and action, and guide, articulate, and co-ordinate individual and group efforts.

To perform these tasks successfully the high-school principal would seem to need, above all, a vision and a policy—a vision which comprehends school activities as they arise and make claim for immediate attention, and a vision which is superior in its outlook and which is above and in excess of the view needed for the temporary emergency and the daily routine—and an educational policy that shall rest firmly upon solid convictions scientifically grounded and experimentally tested in practice.

That relatively few high-school principals conceive of their office in this manner, or conceiving of it thus are able or willing to take the time necessary to administer it after this fashion, is an opinion held by many observers of their work. Specifically, some of the criticisms directed to them are as follows: Instead of being real educational leaders in their schools and their communities, they are too frequently servile subjects engaged in trivial, picayunish, inconsequential matters of varied kinds and forms. Instead of having a well-conceived educational policy for their school which projects itself far into the future, they are in too many instances content to grapple with problems as they casually arise and to settle them in the light of expediency or of shortsighted policy. Instead of organizing their schools in accordance with scientific principles, they are often guided by tradition, by customs in neighboring schools, or by local or personal convenience. Instead of utilizing their superior opportunities for studying the school processes, evaluating results, and unifying practice, they frequently permit inco-ordination of work, ignore serious breaches of pedagogical method, and give countenance to an unregulated mode of procedure on the part of their assistants and teachers. Instead of

being inspirers of young teachers, guides to older ones, and champions and solicitors for all, whether in the school, before the board of education, or with the community at large, principals seem sometimes to prefer to occupy easy chairs in the office, acting as affable reception committees of one when fawning parents or obsequious traveling salesmen appear, or posing as stern disciplinarians when a school offender is forced on their presence. Instead of being accredited ambassadors of culture and education before the public and serving as expert counselors when matters of vital educational import are being decided, they often with little excuse absent themselves from public gatherings of real importance and abandon their true posts to ignorant demagogues. Instead of concerning themselves with the larger social welfare of pupils and giving adequate attention to the multiplicity of agencies which make attractive bids for their extra classroom interests and activities—agencies which are pregnant with character-making, power-giving qualities when properly controlled and administered—they too commonly either seek to repress the youthful enthusiasms which manifest themselves, or else allow them to run a haphazard course through various forms of collateral school undertakings that produce such effects as chance may decree.

Is this too severe an indictment of certain types of high-school principals? That all of them fully live up to their opportunities in all particulars could scarcely be maintained even by the principals themselves or be expected by their harshest critics. That many fail to utilize in full measure even the most important advantages of their positions is doubtless a thesis that could easily be defended. That most even of the better trained and more fortunately situated principals waste an enormous amount of time and effort in giving personal attention to many small matters that could readily, and often much more effectively, be delegated to subordinates is demonstrable in almost any selected school system.

As an illustration of the multiple and varied kinds of work that occupy the time of principals, there is presented herewith, with proper names omitted or altered, a copy of a letter written

by a principal of a large high school and giving the routine duties performed by him during three hours of a "typical" day.

I have your letter of April 2, 1920, on the subject of high-school principals' duties. It happens that on April 14 I kept a record of the things that I did during three hours one morning. They are as follows:

1. Had a conference with Miss A. on the subject of special public-speaking classes.
2. B told me about C. A., one of our boys who is carrying thirty-three hours of work a week in school and is earning \$8.00 a day at X and Y's Manufacturing Plant.
3. Declined an invitation to eat at a Y.M.C.A. banquet tonight.
4. Had a conference with Miss C. about her salary and her summer's work. She is going to F College, Massachusetts.
5. Miss D. came in to show how she had smashed her finger in one of our improved doors.
6. Had a consultation with grade principals on the increase in absence.
7. Had a conference with Mr. L., our janitor, which included the following subjects:
 - a) Rooms for Miss S. who is to give a demonstration in physical training.
 - b) Clean bricks out of auditorium.
 - c) Make a requisition for new plaster in our back entry.
 - d) Use cinders to fill up mud holes in yard instead of paying a man to cart them away.
 - e) Rake up tin cans that have been strewn about the yard for the last two years.
 - f) Looked at one of Mr. L.'s fingers which he had jammed in one of our improved doors.
 - g) Make a requisition for broken window ropes.
 - h) Make a requisition for new lights in the auditorium.
8. Interview with F. J. regarding scholarship and conduct.
9. Arranged with Miss T. to close the bookstore during Periods V and VIII.
10. Issued a permit to J. H. to drop R.O.T.C. on account of his health.
11. Conference on the approaching election at the Teachers' Club.
12. Conference with Mr. W. about opera tickets.
13. Received the records made by our pupils at M College during the first semester. They include one A, nine B's, eight C's, one D, and one E.
14. Conference with Miss D. about E. C. She is a high-rank student and should go to college, but her father thinks she must stop and earn some money as a stenographer.
15. Miss N. brought an excellent poem in free verse by M. B., the subject being "Why One Should Study Greek."
16. Mrs. R. M. called up to arrange about a boy from St. Louis who wishes to enter 8 A.

17. J. A. hurt his foot in the gymnasium.
18. Suspended O. H. for chronic truancy.
19. Had a call from A. B. S., Davenport, Iowa. He is attending the National Academy of Sense Instruction.
20. Had a session with Mr. W., the auditor. The business manager claimed that I owed him \$350 and Mr. W. finds that he owes me \$65.
21. E. C. and S. F. have received conditions in French 4A. As they are pupils working for *cum laude* diplomas, Mr. G. thinks that something is wrong with the French Department.
22. A delegation of boys called upon me to get permission to raise money to buy rings for the basket-ball team.
23. Our records at B College for the first semester showed six B's, three C's, and one E.
24. Dictated letters as follows:
 - a) Acknowledged eleven applications for jobs.
 - b) Signed E. W.'s college recommendation.
 - c) Wrote C. W. F. about his daughter.
 - d) Sent \$2 to H. V. C. for dues in the National Association of Secondary School Principals.
 - e) Mailed financial statement to Mr. I.
 - f) Wrote O. W. D. about his son's truancy.
 - g) Sent Professor X. Y. Z. an invitation to deliver the commencement address.
 - h) Wrote Mr. C. A. J. about young Thompson.
 - i) Wrote Mr. F. Z. S. about our county educational system.
 - j) Wrote Professor L. M. Y.
25. From two to five, attended the High School Principals' meeting.
26. In the evening attended a high-school dance.

This day is fairly typical. It is not much busier or much less busy than most other days. Perhaps it is a little less strenuous than the average.

In point of activity this seems to represent a full half day's work of three hours, it being noted that the "principals' meeting" and the "dance" inadvertently got included in the list of morning tasks, whereas they actually occurred after the principal had taken a few moments off for lunch. And yet the writer says the day was "a little less strenuous than the average."

The pertinent query is: How many of the items really merited the personal attention of a principal? Possibly all of them. Still, one wonders, if this is an "average" day's procedure, why tin cans should have been left "strewn about the yard for the last two years"; why the janitor needed to be told to "clean bricks out of

the auditorium"; why Miss D. had to make a trip to the office in order to show how she had smashed her finger. However, there is far from being any desire to take away a quantum of harmless pleasures from any principal!

It is only fair to the discussion before us to add that the writer of the foregoing statements, regarded as one of the most successful and efficient principals in his state, closed his letter in the following manner:

Among the other things that a high-school principal does, I think, in passing, of the following: (1) hire teachers; (2) plan courses of study; (3) rate teachers' standing; (4) hold teachers' meetings; (5) visit classes; (6) attend teachers' conventions; (7) attend high-school shows; (8) attend high-school games; (9) attend all sorts of public meetings; (10) assist in running the Parent-Teachers' Association; (11) answer questionnaires from college professors and from about fifty-seven varieties of other people.

In order to learn as nearly as possible just how principals in general conceive of their positions and how they actually administer their offices, the Commission of Secondary Schools of the North Central Association of Colleges and Secondary Schools made the "Duties of High-School Principals" the subject of its special investigation this year. A questionnaire was sent to all secondary schools seeking accredited relations. At the top of each questionnaire was conspicuously printed the following paragraph:

Objectives: The purpose of this study is to learn precisely what are the duties and privileges of the high-school principal in the North Central Association schools. It is recognized that the functions suggested below are generally exercised by some school authority, but that in many systems they are the responsibilities of the superintendent or board of education. *We are here concerned solely with the principal. Therefore, except where there is no real high-school principal, or where, in schools of fewer than 150 pupils, the office of principal is, in effect, merged with that of the superintendent, the replies should pertain to the office of the principal, and not that of other school authorities.* In view of this fact, this blank should be filled out by the high-school principal himself.

The blank contained approximately one hundred specific questions, arranged under four main headings, namely, (1) administrative, (2) supervisory, (3) appraising, recording, experimenting, and (4) relational and personal. Every question, except those grouped under one small subdivision, was so worded that the answer was of necessity recorded as "Yes" or "No" or by a check mark.

Granted that a questionnaire of this type does not give a complete picture of all the activities of a principal, it does furnish a pretty accurate guide to the general character of the administration of the office. Personal opinions were not desired, and were, in no case, asked. What was sought were facts, and facts are what were obtained, provided, of course, replies were honestly recorded. There is no reason to doubt that this was not the case.

At the time the compilations were made, replies had been received from 1,420 schools. While not every principal gave an answer to every question, the omissions were rare indeed. The result is that the association has obtained a mass of positive data respecting the organization and administration of the principal's office which makes somewhat easier the formation of a composite picture of the secondary schools.

In compiling the data, the reports from all non-public schools were omitted, i.e., private schools, military schools, parochial schools, and schools attached to institutions of higher learning as academies or teacher-training model high schools. The remaining 1,350 were then classified in three groups as follows: (1) large schools having an enrolment in excess of 350 pupils; (2) medium schools having an enrolment between 150 and 351 pupils; (3) small schools having an enrolment less than 151 pupils.

The number of schools found to fall within these three divisions is: (1) large, 436, or 32.3 per cent of the entire number; (2) medium 610, or 45.2 per cent of the entire number; (3) small, 304, or 22.5 per cent of the entire number.

Space will not permit the inclusion here of a detailed table giving the results of the study thus made. It will repay each principal to examine the detailed table which is to appear in the *Proceedings of the North Central Association*, and to form conclusions therefrom for himself. Surely some startling facts are revealed—facts that justify many of the criticisms that have been directed to typical secondary-school men in the past, and at the same time facts that indicate that these men are not altogether unconscious of their obligations or are indifferent to them.

Among the conspicuous facts revealed by the table are the following.

Only 36.2 per cent of the principals in the North Central accredited schools have assistant principals, and but 30.9 per cent have full-time office secretaries or clerks. Nevertheless, 34.2 per cent assert that they delegate large administrative duties to standing committees of teachers, 62.8 per cent to individual teachers, and 50.0 per cent to heads of departments. Deans of girls are found in almost exactly 25 per cent of the schools.

In a typical average day the typical principal spends his time approximately as follows: 40 minutes inspecting the building; 40 to 60 minutes supervising instruction; 90 minutes teaching classes; 40 minutes taking charge of session-rooms; 60 minutes carrying on routine office work; 30 minutes holding conferences with teachers; 30 minutes holding interviews with pupils; 30 minutes interviewing callers; 30 minutes attending student collateral activities; 30 minutes attending civic and out-of-school professional matters. This gives a total working day of about 440 minutes or $7\frac{1}{3}$ hours and, superficially examined, the uses made of it appear not seriously questionable.

By examining more critically the items that enter into this routine day many interesting practices are disclosed. Thus about 6 per cent of the principals consider that the inspection of the building is not a part of their job; 14.3 per cent make no pretense of supervising the instruction in their schools, and 23.1 per cent more of them do so on the average of less than 31 minutes per day; 73 per cent teach one or more classes per day; 51.7 per cent take charge of the session-room a portion of each day; all but 4.4 per cent devote a considerable portion of each day to routine office duties, answering correspondence, keeping records, making out requisition papers, and the like; 3.5 per cent hold no conferences with teachers, and another 52 per cent do so for only half an hour per day; approximately 47 per cent either make no provision for interviewing pupils or else dispose of the task in less than 30 minutes daily; 14.7 per cent have no time whatever set aside for callers and 51.9 per cent additional devote less than 31 minutes to interviews; 8.5 per cent do not concern themselves with student collateral activities, 30.7 per cent more spend less than 30 minutes with this phase of school work, and an additional 33.5 per cent accomplish all they

desire in approximately 30 minutes per day; and, finally, 16.7 per cent give no attention to civic matters and out-of-school professional matters, 39.0 per cent devote under 21 minutes to the matter, and only 12.9 per cent consider the practice sufficiently vital to give to it more than 30 minutes per day.

In the exercise of professional powers, 42.8 per cent exercise no right to interview candidates for teaching positions; about half, 53.9 per cent, have the right to recommend new teachers, and approximately the same number, 52.5 per cent, have some authority in respect to substitute teachers. A slightly larger number, 62.1 per cent, make recommendations for promotions, but only 55.7 per cent have any voice in respect to salaries. On the other hand, 65.2 per cent are expected to take the initiative in suspending and dismissing teachers from the service.

In making courses of study, recommending textbooks, making syllabi of instruction, and determining prescriptions for graduation approximately 75 per cent of the principals seem to be given a rather free hand, but in formulating and recommending a building budget only 25.9 per cent are given any power whatever; in recommending building policies and programs, only 41.2 per cent are consulted; while in selecting school equipment 75.7 per cent have their views honored.

Only 48.8 per cent are accustomed to attend meetings of the board of education even though matters pertaining to the high school are to be considered, and only 70.4 per cent have the power to arrange commencement exercises and to preside at them.

On the other hand, 91.3 per cent are given supervisory control of student activities and 84.8 per cent have control of student funds. Again, while 88.3 per cent are given nominal power to determine the general organization and administration of their own school, and 95.2 per cent are permitted to call separate high-school teachers' meetings, only 63.2 per cent have control and direction of the janitorial staff within their school, and only 70.2 per cent can nominate their own assistant administrator.

In respect to managerial duties, nearly 95 per cent of the principals report that they outline their school policies to their assistants and teachers from time to time, solicit their criticisms

and suggestions, and seek to organize their staffs into effective, enthusiastic agencies of administration. About 5 per cent deny that they employ any such practices and seemingly are as autocratic as medieval monarchs. But even among the majority, large numbers refuse to delegate duties or are unable to do so. Only 45.8 per cent of them turn over even minor matters to paid clerks, and 35.2 per cent refuse to relinquish to responsible assistants even the details of what they conceive to be large matters. Nearly all, 93.6 per cent at least, seek to keep their hands on the pulse of the school by arranging and conducting the stated auditorium or assembly exercises.

Under the head of *supervision*, some interesting practices are revealed. The typical principal pays a visit to each classroom once in two weeks and stays from 15 to 20 minutes; he comments orally to the teachers on the work observed; offers constructive criticisms; supplements his visits with personal conferences; invites teachers to seek advice from superiors; and holds frequent teachers' meetings designed to consider and improve methods of teaching. To do this requires from one-tenth to one-fifth of all the available time. About three-fourths of the principals, likewise, make a practice of encouraging teachers to visit other teachers in their own building or in other systems, bring pressure to bear upon teachers to attend college or university summer sessions at least once in five years, and calculate increases in salaries partly upon continued systematic effort at self-improvement.

On the other hand, only a variable minority of principals ever give demonstration lessons with classes at the time of their visits, conduct reading-circle or study clubs of high-school teachers, hold teachers' institutes oftener than once per year, or have any form of promotional examination for teachers. Only about half the principals ever participate at all in the class work witnessed during their visits of supervision, or ask any questions of pupils or teachers.

In the newer fields of appraising, recording, and experimenting, less than one-third of the principals make use of rating scales to measure the accomplishments of teachers and pupils. This, of course, is not surprising. That the majority of them are interested in the new scientific movement is evidenced by the fact that 87.6

per cent profess to be lending their support at present to the movement centering in scientific studies and experiments, while 42.9 per cent are actually carrying on in their schools studies and experiments of these kinds.

Few schools have as yet a bureau of statistical measurements, and fewer still have an educational or psychological clinic. Moreover, while 63.1 per cent make a practice of analyzing the data relating to the promotion, failure, and elimination of pupils and of formulating an age-grade report each year, only 35.1 per cent have any well-organized plan of educational and vocational guidance; only 29.7 per cent have placement bureaus; and only 31.0 per cent have any plan of follow-up analyses and help. Only 45.4 per cent likewise make any study of the cost of instruction by subjects.

So far as the present study pertains to the relational and personal duties and privileges of the principal the following facts are revealed: 47.8 per cent of all principals have direct control of the school census of high-school pupils; in the case of 50.4 per cent of the schools, the attendance officers are responsible to the principals where high-school pupils are concerned; in 27.9 per cent of the schools a high-school parent-teachers' association is in operation; in 54.2 per cent of the schools the border-line duties of superintendent and principal seemingly are clearly defined, though these figures would argue that in 45.8 per cent of the schools there is still opportunity for administrative friction; and in 86.2 per cent of the schools superintendents and principals hold frequent consultations at which policies relating to the high school are formulated.

In several cases heads of departments appear to be either figureheads or independent rulers, since in only 58 per cent of the schools are stated conferences with the principal held. Neither is there as close a correlation as could be wished between the principal's office and the city health office, juvenile court, and other auxiliary civic educational agencies, as only 68.2 per cent make claim to any well-conceived plan of co-operation.

On the other hand, over 80 per cent of the principals seem to be working in harmony with local religious organizations, making

systematic use of newspapers in order to give publicity to school policies, needs, and practices, and aiming to make the moral training of youths a deep concern of themselves and their staffs.

Most principals seem to desire to be real leaders in the political, civic, and educational life of their communities, and seek to inspire in their teachers a real professional interest and attitude. Nevertheless, only 38.2 per cent of all the principals reporting make a practice of writing articles of an educational character and having them published in magazine or book form, although 85.1 per cent report that they do make a practice of addressing their fellow-citizens on educational topics when invited to do so.

Of 1,350 principals 17.6 per cent confess that some time during the academic year (not alone during vacation times) they engage "in gainful occupations of a non-professional kind in order to add to their sources of income." Whether this is a cause of congratulation or condemnation is not clear. If the duties for which principals are paid are in no wise interrupted or diverted by such occupations, or if such outside labors serve as real agencies of relaxation and recreation, of course no fault can be found. If, on the other hand, such outside work is interpreted to mean that a principal has a lack of interest in education as a profession, or that he finds the schedules of salaries so inadequate as to compel him of necessity to follow such a course, then surely something is wrong with the work of high-school administration. And yet, in spite of the suggestion of weak professional interest involved in the percentages given, 86.7 per cent of these same principals are making a practice of utilizing summer vacations, frequently, for extensive travel or for attendance in college and university summer schools, while 97.8 per cent of them declare that they try to keep abreast of the times by systematically devoting a portion of each week to reading professional articles, books, and treatises. It may, of course, be that the former practices are followed in order to make the latter practices possible, and hence the end may justify the means.

It would be interesting to compare and contrast the practices of principals in the three several types of schools—large, medium, and small. Analysis shows that the differences are not so much a

matter of kind as they are of degree. The spirit seems to be equally willing in all; however, custom, circumstances, and finances appear to be important differentiating factors.

It likewise would be profitable to compare and contrast the practices found in all the several states that compose the North Central Association. All that has been attempted is to disclose conditions as they are found in four states, each having more than one hundred accredited schools—Ohio, Michigan, Illinois, and Wisconsin. Table II in the *Proceedings of the North Central Association* gives certain items pertaining to these states.

Several conspicuous variations in practice are to be found within them. In Michigan, and to a considerable degree in Ohio, the principal's office seems not to be exalted highly; in Illinois and Wisconsin it is. A few items will indicate the discrepancies. In Illinois and Wisconsin respectively 88.7 per cent and 84.6 per cent of the principals interview teacher candidates, whereas in Ohio but 61.5 per cent do so, and in Michigan but 43.8 per cent. Likewise, in Wisconsin 92.3 per cent recommend promotions of teachers; in Illinois the percentage is 85.7; in Ohio, 56.2; and in Michigan, 53.0.

Similarly, in Wisconsin 48.4 per cent of the principals formulate financial budgets, and 69.4 per cent recommend building policies. In Illinois the percentages are 51.8 and 65.9 respectively; in Ohio they are 14.4 and 30.5; in Michigan, 16.1 and 12.6.

Again, in Illinois and Wisconsin over 90 per cent of the principals arrange for, and preside at, commencement exercises; in Ohio and Michigan only 50 to 60 per cent do so. In Wisconsin 74.7 per cent of the principals attend meetings of the board of education whenever important matters pertaining to the high school are to be considered; in Illinois the percentage is 71.9; in Ohio, 36.8; and in Michigan, 14.8.

Finally, in Ohio 25.0 per cent of the principals engage in gainful occupations of non-professional kinds during some period of the year; in Wisconsin the percentage is 21.2; in Illinois it is 15.7; and in Michigan it is 13.5.

What may be said as to the value of the study thus made, and what general condition has it revealed? First, the study professedly was not one that sought a report from every principal

as to what he does with his job. Such study would have involved almost an endless number of detailed inquiries that principals could neither readily give nor compilers readily record. What was sought was definite answers to a limited number of specific questions. The figures show that while not all principals have clear ideas as to what their tasks are and that many are consuming time and energy in ways that possess dubious justification, the group as an official body does not deserve all the adverse criticism that is frequently directed against it.

Perhaps the greatest value of the study is that it suggests, though somewhat inadequately, some of the specific items of deep concern for principals and indicates the percentages of principals actually dealing with them. Thus the investigation should stimulate some principals to study their jobs anew; it should encourage others to keep on with practices about which they may have had some doubt; and it should lead some to modify their procedure radically.

The real duties of a high-school principal revealed by the study may be formulated thus:

1. To formulate a vision and a policy for the school over which he presides and to communicate this vision to his entire staff of assistants.
2. To lead in the formulation of ways and means for realizing their vision and policy.
3. To supervise instruction, inspire teachers and pupils, coordinate and articulate efforts, and secure unity of spirit and practice.
4. To serve as the school's accredited agent before the public and to enlighten and advise the public in respect to what the schools are undertaking, what they are achieving, what are their needs, and what education truly signifies.
5. To share confidences with his teachers and pupils, capitalize their intelligence and enthusiasm, delegate to them as large and as many responsibilities as circumstances permit, and integrate and unify the work of the entire school.

HOMOGENEOUS GROUPING IN THE FIRST YEAR OF A FIVE-YEAR HIGH SCHOOL

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In 1894, the Muskegon, Michigan, Board of Education transferred the entire eighth grade of the city to the high-school building and created a five-year high school. This was not done at that time with any idea of making the eighth grade an integral part of the high school, nor, so far as can be determined, with any thought of the formation of a junior high school. It was done simply as a measure to meet local conditions. However, as the years went by, the eighth grade was absorbed into the organization of the high school to such an extent that at present it forms what we call the first year of a five-year high-school course. There is one principal for the building and a continuous course of study. The teachers are considered members of the high-school faculty, and the students themselves are thought of as belonging to the high school.

For the last few years a definite attempt has been made to reorganize this institution by having a different plan of organization for the eighth and ninth grades and for the tenth, eleventh, and twelfth grades. This explanation is made in order to give a background for a discussion of an experiment which has been made with the grouping of individuals according to their ability. The organization is such that it cannot be called strictly a junior high school, but it is an attempt to introduce the spirit of the junior high school organization into a five-year school. The period covered in the experiment to be discussed is from the first semester, 1918, through the second semester ending June, 1920.

In the beginning, the character of the grouping was as follows: Pupils were divided into three groups, "poor," "medium," and "good." Following that, a second division was made on the basis of sex so that we had groups of poor, medium, and good

boys and poor, medium, and good girls. After a trial of one semester, the plan of segregating the pupils on the basis of sex was abandoned except in physiology, physical education, and all industrial classes. The practical disadvantages of segregating all of the pupils according to sex and then of reclassifying them according to ability in different sections so outweighed any benefit gained from the plan of sex segregation that we do not recommend it for general use. Of course, there is a tendency on the part of boys of adolescent age to "show off," and on the part of some girls to attract attention, but there is no particular reason why skilful teachers cannot turn to good account the natural desire of pupils of either sex to appear well in the eyes of the other. Among the reasons given by the teachers for abandoning segregation as to sex are the following: (1) Children become self-conscious. (2) All viewpoints need to be brought together to keep the work from becoming too narrow. (3) Friendly rivalry between boys and girls is conducive to better class work. In the same report segregation as to sex in physiology classes is recommended; at present the subject is being taught in that way. It is a matter of little argument that better work can be done in segregated classes in the teaching of personal and sex hygiene.

Pupils were selected for these groups in the following way: At first, we used the Rugg-Freeman Intelligence Test; but this test as a means for determining the classification of pupils was not satisfactory. We found a wide variation in the ratings the pupils received in this test as compared with the marks received in their classes; many pupils who received a high mark in their class work received a low rating in the intelligence test. We feel this to be not so much an indictment of the intelligence test, as it is a criticism of the conditions under which the tests were administered. Since it was the first time they had been given here, the instructions were not clearly understood and were not carried out fully. Neither teachers nor pupils properly understood the giving or the taking of a group intelligence test.

Accordingly, the following semester, in January, 1919, we augmented intelligence tests by a consensus of opinion of all the classroom teachers. That is to say, the grades which the pupils

received in the preceding semester, together with the ratings which they received in the intelligence test, were made the basis for their classification. In the case of a wide variation between the marks received by the pupil the preceding semester and the mark received in the intelligence test, the plan of procedure was to classify pupils tentatively according to the marks received the preceding semester. As a result of this method, very few adjustments have had to be made because of improper classification. We are not wedded to this method of classifying pupils. As intelligence tests are perfected, and as the giving and taking of intelligence tests become more thoroughly understood, it may be possible to classify pupils entirely on the basis of intelligence tests.

At present, as a result of two years of experience, we believe that the preponderance of evidence is in favor of the use of intelligence tests supplemented by the personal testimony of the pupil's former teachers. In such a city as Muskegon where the seventh-grade work is taken under the departmental plan of organization and it is impossible to get a personal opinion of one teacher, we use the marks which the pupil has received in his preceding grade. The question here arises, if a pupil should be poor in arithmetic, excellent in reading, and fair in history, shall he be classified in three different sections? The reply to that question, from practical experience, is this: If such a case should arise, we would classify the pupil in three sections. Such cases, however, are so rare that individual attention can be given them. Fifty-eight per cent of the pupils who failed, received a deficiency slip in two or more subjects, indicating that when a pupil in our eighth grade fails he fails in more than one subject. The converse of this proposition is also true. In short, our experience has taught us that with us a pupil poor in one subject is weak in all, and a pupil good in one subject is good in all.

The character of the work done in the various sections differs. In the first place, an attempt is made to adapt the method of teaching to the requirements of each group. In the good section, much use is made of the device known as the "socialized recitation." This is done to encourage and develop originality and initiative. We feel that under the guidance of a wise teacher pupils who are

classified in the good sections are capable of developing the essential qualities of leadership. Less emphasis is placed upon merely routine drill work; more is placed upon that type of recitation which brings out the ability of the pupil to think for himself. The atmosphere in the good section is considerably less formal than in the other two. The period taken up for the assignment of the lesson is shorter than that in the other two sections, and the pupils develop their lessons with a minimum of help by the teachers.

In the fair section, there is more emphasis placed upon drill. We find this to be an essential in dealing with the pupils who are rated as fair or medium in ability. They need drill work constantly. There is also a careful and very full development of each new lesson. The period for the assignment is longer than that in the good section and not so long as that for the poor section. From what has been said, we do not wish to give the impression that initiative and originality are not encouraged in these fair sections. They are; but due to the fact that more time must be given to the purely routine tasks, there is less opportunity to use devices which tend to bring out the natural capacity of the pupils for original work. The study period of the pupils is more carefully supervised than in the case of the good sections.

Our method of teaching in the poor sections places emphasis upon drill and review. Constant drill in the fundamentals of arithmetic, reading, spelling, and language is essential if these classes are to be worth while. Our experience has taught us that one of the reasons why a pupil is placed in a poor section is that he lacks the fundamental groundwork in these essential subjects. Frequently, having mastered the fundamentals of a subject, a pupil progresses so rapidly that he is placed in a good section. The watchwords of the teachers of the poor sections are "drill" and "review." One factor in the successful teaching of the poor sections is the emphasis placed upon the personal aid given the individual student. When possible, classes are purposely restricted to twenty-five in order that the teacher may have a personal, intimate contact with these slow pupils. Rapid class instruction is not possible because the minds of the pupils work very slowly. Whether this slowness is due to some abnormal mental trait, or

whether it is due to the lack of a grasp of the fundamental principles of the subject, the result is the same: the pupils become confused, and the effect of any rapid drill is lost.

Anyone at all familiar with the psychology of adolescence knows that, aside from the comparatively easily diagnosed mental condition known as *dementia praecox*, there are many cases of retardation not so easily classified. Sometimes this condition is only temporary; always it is aggravated by a lack of sympathetic understanding and the proper treatment. While not all of the pupils in this poor section are suffering from some obscure mental disease peculiar to adolescence, many of them are, and they require the most careful and experienced teaching.

A great deal of attention is paid to the assignment of the lesson. We feel that our experience has taught that with these slow pupils the best results are obtained when fifteen or twenty minutes of a forty-five-minute period is devoted to a development of the next day's lesson. A careful explanation of the terms used, of the methods of procedure involved, and of the results expected is very necessary. Definiteness and concreteness are two essentials. Here again, it ought to be said that whatever of initiative and originality the pupils of poor sections possess is not deliberately repressed but is subordinated to an attempt to give them a thorough training in the groundwork of the subject involved.

The content of the subject-matter offered to the three sections does not differ much except that with the good section the work involved is elaborated and much supplementary work done. When possible, original research is attempted with the good sections; notebook work is encouraged and outside reading carried on in connection with the work in history and English literature; the work with good sections is intensive and extensive.

With the fair sections the basic principles of all topics are taught as presented in course outlines. Some supplementary work is done but the reading lists in history and English are not so extensive as with the good group, and the textbook is adhered to more closely. With the poor sections, many of the difficult phases of the outline are omitted and more simple work of a similar nature is substituted. The basic principles of the subjects involved are presented, and the

effort is to make all problems concrete. We have found that the outline which is prepared for the average pupil (if there is such a person) is too much for the poor group to do well and too little for the good pupils. It is necessary to readjust the outline for each of the three groups.

The purposes of our attempt at homogeneous grouping are in part as follows:

1. To give to each pupil an equal opportunity to develop as far as the school can aid in his development. We feel this is not true when classes are grouped in the ordinary way. The slow pupil is overwhelmed, the bright pupil is idle, and the average pupil is about the only one who gains appropriately.

2. Another purpose of grouping, frankly, is to give larger opportunity than is now afforded to the brighter pupils. Every generation needs leaders. Perhaps the indictment against the public schools "that they are the killers of genius" has been due to the fact that we have failed to recognize the possibilities of bright pupils; too frequently we have stifled genius. We have tried to put all grades of intelligence through the same educational hopper. A uniform course of study pursued at a uniform rate for all pupils is neither practical nor sound school administration. We hope, by the formation of ability sections, to encourage to its greatest degree whatever of originality or of initiative the pupils in any of these groups may possess.

3. Another purpose of this grouping is to aid the slow pupils to a fuller expression of their intellectual life. Any school man will testify that the effect upon a slow pupil, mentally defective or not, of putting him in the same group with the unusually bright children is harmful in several ways. If the pupil is slow merely because of some natural mental attribute, he is very bashful about expressing himself when he has to do so in the presence of others who think more rapidly than he does. Consequently, he early forms the habit of silence; his backwardness is accentuated. At this point, it ought to be made quite clear that the group designated as poor or slow is not made up of children who are deficient mentally. While there may be some cases of mentally retarded pupils in these groups, the basis for admission to this group, as pointed out,

is not mental deficiency. Many pupils, slow at this age, later surpass their more brilliant schoolmates. We believe it is only just to these children to give them an opportunity to cover fundamental work more painstakingly in order that when they do arrive at the full maturity of their mental powers, they will be well versed in the essentials of the subject.

4. The case of those who are grouped as fair is possibly not so clear, although we aim through this grouping to provide "average" pupils (who, by the way, make up the large majority of our school system) freedom from the precocity of the bright on the one hand, and from the somewhat depressing effect of the slow students on the other.

5. Another avowed purpose of this grouping is to reduce the percentage of failures among the eighth-grade pupils. Although the teachers have maintained that homogeneous grouping materially reduced the percentage of failures, statistics seem to indicate that the only argument which can be made in this regard is that the regrouping of pupils has but slightly, and in some cases not at all, reduced the percentage of failures.

In short, the purpose of homogeneous grouping with us might be summed up as an attempt to provide equal opportunity for all types of pupils through the recognition of individual differences.

The reports of teachers indicate that there are two outstanding dangers which should be avoided in classifying pupils:

1. Allowing the pupil to feel that the present grouping is permanent. This reacts in two ways. The excellent pupil is inclined to exaggerate his own importance and to feel that having been placed with the good section, he cannot be demoted. On the other hand, the pupil assigned to the poor group may feel that he has no opportunity to advance into one of the other two groups. We have tried to make pupils feel that poor work on the part of pupils in the higher section will mean immediate remission to some lower section, and conversely, that improved work in a lower section will mean promotion into one of the groups above.

2. Placing the various groups with unsympathetic teachers. The problem of the principal in organizing a school, if he adopts some plan for homogeneous grouping, will be to find the right type

of teacher for each group. In general, it might be said, although perhaps a dangerous statement to make, that it is more important to find the proper teacher for the poor section than for the good group. The teacher of the poor group must be tactful, sympathetic, and thoroughly in harmony with the purposes of the classification. If she be resentful of her assignment and impatient with the slow pupils, the effect of the classification will be worse than if the usual plan is carried out. On the other hand, it is quite important that a teacher assigned to the good group shall in every way encourage and develop the idea which the principal of the school has. The problem of finding proper teachers for these groups is the most important one which a principal faces; the success of the whole plan will depend largely upon his success in solving this vexing question.

Some statistics have been collected which may throw an interesting side light on the grouping of pupils according to ability. The statement was made above that the rating of the intelligence test was not wholly satisfactory when used as the only basis for grouping pupils, and that frequently marks of the pupils in their subjects might entitle them to an excellent rating, while their intelligence-test ratings would place them in a lower group.

Table I should be read as follows: Student No. 1 received in an intelligence test a rating of 45 and he was given ninth place in that grouping. His average in mathematics and English was 97.3 and he received first place in a group of twenty-five. His average in mathematics for two years (Grades VIII and IX) was 96.7; his average for two years in English (Grades VIII and IX) was 98. Student No. 24, who received the highest intelligence rating of 69, had an average of 83.6 in mathematics and English, and was rated as thirteenth in these subjects. In other words, according to his intelligence test we would have placed Student No. 24 in a good section and Student No. 1 in a fair or poor section. Supplemented by the information we obtained from his marks of the previous semester, we placed Student No. 1 in a good section and Student No. 24 in a fair section.

An interesting side light arises from a study of this table, namely, that students who received high marks in mathematics

in this group also received them in English. To choose at random, a pupil, Student No. 8, received one "G," three "G+" marks in mathematics in the VIII-1 grade through the IX-2, or an average in percentage of 91.7. In English, he received three "G+" and one "X," or an average in percentage of 94.2. A study of these

TABLE I

COMPARISON OF RATINGS RECEIVED BY TWENTY-FIVE STUDENTS IN AN INTELLIGENCE TEST AND THEIR MARKS IN MATHEMATICS AND ENGLISH
(Good Section Record Covering Two Years' Work)

Student	Rating Intelligence Test	Place	Average Mathematics and English	Place	Mathematics				Average Mathematics	English				Average English
					VIII-1	VIII-2	IX-1	IX-2		VIII-1	VIII-2	IX-1	IX-2	
1.....	45	9	97.3	1	G+	X	X	X	96.7	X	X	X	X	98.0
2.....	.....	.....	96.7	2	X	X	X	X	96.7	X	X	X	X	96.7
3.....	60	4	96.7	2	X	X	X	X	96.7	G+	X	X	X	95.5
4.....	.....	.....	96.7	2	G+	X	X	X	96.7	X	X	X	X	96.7
5.....	57	5	96.1	3	X	X	X	X	96.7	X	X	X	X	95.5
6.....	63	3	93.6	4	G+	G	G+	X	93.0	G+	G+	G+	X	94.2
7.....	54	6	93.6	4	G+	G+	G+	G+	91.7	G+	X	X	X	95.5
8.....	36	11	92.9	5	G	X	G+	G+	91.7	G	X	G+	X	94.2
9.....	54	6	92.9	5	G	X	G+	G+	91.7	G	X	G+	X	94.2
10.....	45	9	92.9	5	G	G+	G+	X	94.2	G+	G	G+	G+	91.7
11.....	63	3	91.7	6	X	G+	X	G	94.2	F+	G	G	G	80.2
12.....	.....	.....	91.1	7	G+	X	G+	F+	91.7	G	X	X	F+	90.5
13.....	30	12	89.8	8	F	G+	G	G+	86.7	G	X	G+	G+	93.0
14.....	42	10	89.2	9	F	G	G	F+	85.5	G	G	X	G+	93.0
15.....	45	9	88.6	10	G	X	G	F+	91.7	G	G	F+	F+	85.5
16.....	63	3	88.6	10	G	F	F	G+	86.7	G	G	G	X	90.5
17.....	57	5	88.6	10	F	F	G	G+	85.5	G	G	G	X	91.7
18.....	42	10	86.1	11	G+	G+	F	G+	88.0	F	G+	F	G+	84.2
19.....	45	9	86.1	11	F+	X	F	F+	85.5	G	G+	F	G	86.7
20.....	48	8	86.1	11	G+	G+	F	F+	86.7	G	G	F	F+	85.5
21.....	30	11	86.1	11	G+	F	G+	F+	86.7	G	F	G+	F+	85.5
22.....	31	7	84.2	12	G	F	F	G	81.7	F	F	G	G+	86.7
23.....	66	2	83.6	12	G	F	F	F	81.7	G+	F	G	G+	86.7
24.....	60	1	83.6	13	F	G	F	F	83.0	G+	F+	G	F+	84.2
25.....	.....	.....	83.6	13	G	F+	G	F	81.7	G+	F+	F+	F+	85.5
Average.	51	.....	90.28	.....	.....	.....	.....	.....	89.75	.....	.....	.....	.....	90.82

Average English.....90.82 per cent

Average Mathematics.....89.75 per cent

Difference.....1.07 per cent

Average Intelligence Test.....51

marks will bear out the assertion which was made earlier in this article, that the problem of having pupils classified as "X" in one subject and "P" in another, is not a serious one. A careful tabulation of our students has shown us that it is only the occasional child who is so rated.

TABLE II
NUMBER AND PERCENTAGE OF FAILURES IN THE VIII-1 GRADE BEFORE AND AFTER
HOMOGENEOUS GROUPING

YEAR	SEMESTER	NUMBER ENROLLED	NUMBER PROMOTED	NUMBER FAILED	PER CENT FAILED
English					
Ungrouped					
1916-17.....	1	235	231	4	1.7
1916-17.....	2	142	128	14	9.8
1917-18.....	1	213	172	41	19.2
1917-18.....	2	160	123	37	23.1
Grouped					
1918-19.....	1	221	168	53	23.9
1918-19.....	2	188	165	23	12.2
1919-20.....	1	220	198	22	10.0
1919-20.....	2	184	158	26	14.0
Total.....		1,563	1,343	220	.....
Arithmetic					
Ungrouped					
1916-17.....	1	223	183	40	17.9
1916-17.....	2	167	136	31	18.5
1917-18.....	1	200	167	33	16.5
1917-18.....	2	181	151	30	16.5
Grouped					
1918-19.....	1	235	184	51	21.7
1918-19.....	2	199	180	19	9.5
1919-20.....	1	204	173	31	15.1
1919-20.....	2	184	150	34	18.0
Total.....		1,593	1,324	269	.....
Civics					
Ungrouped					
1916-17.....	1	209	177	32	15.3
1916-17.....	2	189	156	33	17.4
1917-18.....	1	205	178	27	13.1
1917-18.....	2	173	128	45	26.0
Grouped					
1918-19.....	1	237	200	37	15.6
1918-19.....	2	180	172	8	4.4
1919-20.....	1	221	215	6	2.7
1919-20.....	2	178	165	13	7.3
Total.....		1,592	1,391	201	.....
Grand total.....		4,748	4,058	690	.....

Table II is a promotion report for the VIII-1 grade in the three subjects of English, arithmetic, and civics, prior to and after the reclassification according to ability. This table would indicate that beginning with the year 1916-17 in English, when 1.7 per cent only of the pupils failed in that subject, up to the second semester of 1918 when 23.1 per cent failed, there is an ascending scale of failures. In 1918, the grouping plan was introduced and while the percentage in the first semester after the introduction of the grouping plan is 0.8 per cent higher than it was the previous

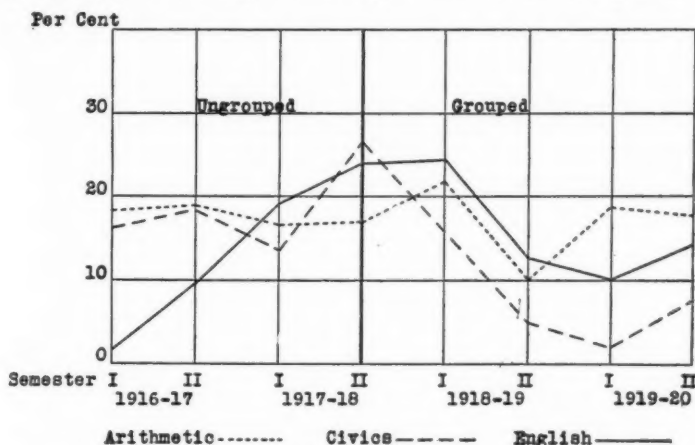


FIG. 1.—Percentage of failures in VIII-1 before and after homogeneous grouping (1916-20).

semester, the following semester it dropped from 23.9 per cent to 12.2 per cent and last year to 10 per cent the first semester and rose to 14 per cent the second. In arithmetic, we find the percentage of failures quite constant through the second semester of 1918, there being a slight increase in the number failed following the introduction of the grouping plan. There is an increase of 5.2 per cent that semester, followed by a sharp decline to 9.5 per cent which rises to 18 per cent the second semester of 1920. Table II reveals similar facts in civics.

The situation with regard to the pupils in the VIII-2 grade is interesting. The grouping does not seem to have lowered at all

the percentage of failures in English. In arithmetic there were in 1916-17, 14.5 per cent of failures and in 1920, 20 per cent. In civics there is a wide fluctuation from 23.6 per cent in the first semester of 1917-18 to 6 per cent in the second semester of 1920. It is obvious that such a showing furnishes no argument for or against homogeneous grouping.

An examination of the records indicates that as far as noticeably decreasing the per cent of failures homogeneous grouping in Muskegon has not been particularly effective.

Figure 1 is a graphic representation of Table II. The curve shows a sharp decline from the second semester of 1917-18 to the second semester of 1918-19 and brings out clearly the tendency of the percentages to rise again. This chart does not indicate that much claim can be made for reclassification on the score that it lowers the percentage of failures.

Table III is rather interesting in that it shows the relation of the failures in each subject in three grades. It should be read as follows: In the first semester of 1916-17 the 1 B (VIII-1 grade) had 1.7 per cent failures in English, in the second semester of the same year as 1 A (VIII-2 grade) 16.5 per cent failures, and in 2 B (IX-1 grade) 11.7 per cent failures. The last two years do not have these percentages as the records have not "worked through" to the ninth grade. As a partial explanation of the increase of failures in the latter half of the eighth grade and the first half of the ninth, it might be said that those are the two semesters when we receive our largest number of pupils from outside of the city school system.

Although the statistics show a somewhat negative picture, the testimony of both teachers and pupils as to the effect and value of homogeneous grouping is favorable. A summary of the written reports of these teachers on the classification of pupils into good sections shows ten reasons for favoring this grouping. For example: "Initiative has been encouraged and developed." "Students have been made more alert through the keen competition with capable classmates." "Responsibility for maintaining high standards of work has been felt." "Inclination to rest on past merit has been checked because maximum effort has been necessary to compete successfully with the group."

Teachers of the fair sections advance eight reasons for favoring ability grouping, among them: "They have been relieved of the fear of criticism from brighter pupils." "They have developed more independence." "Thorough work has been possible at a comfortable speed." "Competition with equals has been enjoyed."

TABLE III

PERCENTAGE OF FAILURES IN ENGLISH AND ARITHMETIC FOR THE SAME GROUPS FOR THREE CONSECUTIVE HALF GRADES BEFORE AND AFTER HOMOGENEOUS GROUPING (1916-20)

YEAR	VIII-1	VIII-2	IX-1
	English		
Ungrouped			
1916-17.....	1.7	16.5	11.7
1916-17.....	9.8	21.4	19.0
1917-18.....	19.2	14.0	14.0
1917-18.....	23.1	19.7	32.0
Grouped			
1918-19.....	23.9	22.0	7.0
1918-19.....	12.2	8.0	14.0
1919-20.....	10.0	12.0	.....
1919-20.....	14.0	.....	.....
	Arithmetic		
Ungrouped			
1916-17.....	17.9	15.3	8.0
1916-17.....	18.5	28.2	21.0
1917-18.....	16.5	20.0	15.0
1917-18.....	16.5	22.6	15.0
Grouped			
1918-19.....	21.7	14.1	14.0
1918-19.....	9.5	13.0	11.0
1919-20.....	19.0	20.0	.....
1919-20.....	18.0	.....	.....

The testimony of the teachers of the poor sections in part is as follows: "They have escaped the ridicule of the capable students." "Their best efforts have been brought out and the best results of which they are capable have been procured." "Through small classes they have had the opportunity for frequent recitations."

Space permits but one quotation from the written testimony of the teachers. A teacher of English composition, after experience with both lower and higher groups, writes:

The teacher of composition is constantly hampered by the recurrence of elementary technical errors. Until these errors are eradicated she does not feel free to handle the larger and more interesting matters of organization and style. The inferior pupil perhaps can never be taught these things; it is enough if he learns to write correct English. In the mixed classes either the poor pupils are thrown into work before they have mastered the matter of accuracy of expression or the good classes are not taught how to handle material, nor given free rein for what real literary ability they possess.

Sometimes it is worth while for us to find out from the pupils themselves what they actually think about any new plan of organization. Pupils in all the groups were asked to state their preference for one of the following plans and to give reasons for their choice.

Plan 1. Should pupils be classified according to ability?

Plan 2. Should pupils be placed in mixed sections and their ability not considered in making the classification?

TABLE IV

Section	Favoring Plan 1	Favoring Plan 2
VIII-2 Good	21	1
VIII-1 Fair	16	5
VIII-1 Poor	15	3
VIII-2 Repeaters	19	1
Total	71	10

A brief summary of the groups reporting on these questions is as follows: Fifty-nine students of the 71 favoring Plan 1 gave as their reason the fact that "good students are benefited"; 35 students favoring Plan 1 gave as their reason the fact that weak students are benefited; of the 10 who favored Plan 2, 6 gave a reason which will appeal to all as a good one: "Poor students are benefited through association with good students." Two pupils felt that "grouped sections are undemocratic"; one, that the pupils in the poorer sections were ridiculed by those in the better.

A reply should be made to the contention of the six who gave as the reason for not favoring Plan 1 the fact that students are benefited through association with students of different degrees

of ability. This, the foremost argument against any attempt at homogeneous grouping, on the surface appears to be sound. Students are benefited by coming in contact with boys and girls of varying ability and of varying stations in life. However, the assumption that if pupils are classified according to ability they will not have an opportunity to mingle with the other students of the school is not founded upon facts. The students of the school are thrown together on the way to and from school, and in their athletics, gymnasium classes, lunchroom, assemblies, and school parties. And after all, through these extra-curricula activities they gain the real spirit of democracy. No one would advocate homogeneous grouping if it could be demonstrated that such grouping would deprive the pupils of this opportunity of intermingling. The wise high-school principal, however, will take pains to organize the extra-curricula activities in such a way that all pupils in the school will be constantly thrown together. Then this argument which otherwise would have some weight ceases to be of importance.

In conclusion, it must be stated frankly that we are still experimenting with grouped classes. It would be unscientific to draw any dogmatic conclusions as to its success. From the point of view of reducing the percentage of failures we have not notably succeeded, but in increasing interest in class work, in offering wider opportunity for individual development, through giving a more intensive course to the slow pupils and a more extensive course to the bright pupils, we feel that the experiment is well worth continuing.

AN IMPORTANT FACTOR IN TEACHING CITIZENSHIP

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Experiences growing out of the war have brought to the attention of thoughtful people, more vividly than ever before, the necessity for definite training in citizenship. The feeling is constantly growing that only through the development of good citizenship will come the wise solution of the problems at the root of the ever-growing, widespread social unrest.

Good citizenship is the product of proper knowledge, right ideals, and correct habits. It consists of being able and desirous of playing one's full part in the co-operative activities of one's community, state, and nation. Obviously an education for such citizenship must aim at creating social intelligence in citizens, on the one hand, and at increasing co-operation to a maximum, on the other hand. Recognizing the increased emphasis that is being placed upon the public school as the agency best fitted for teaching citizenship, the North Central Association through its Commission on Secondary Schools recently made a special study of the high schools in its territory for the purpose of securing data as to the practices in the various schools with respect to the three following aspects of training for citizenship:

- a) Provisions for arousing desirable sentiments of citizenship.
- b) Provision for furnishing information relating to the privileges and duties of citizenship.
- c) Provision for securing from pupils active participation in affairs that tend to develop habits of spontaneous, and also studied, responses that make for good citizenship.

The purpose of this paper is to describe the plan in operation in Devils Lake High School whereby provision is made for training in leadership and practice afforded for perfecting habits of citizenship. The plan is an outgrowth of the belief that adequate results in the teaching of citizenship in a democracy can be fully realized

only through the creation of a democratic environment in the public school where pupils and teachers co-operate in solving school problems—"where the inspiration and social pressure of student upon student will parallel and supplement the work of the teacher."

The Devils Lake High School Students' Association is in no sense a scheme for student self-government in the commonly accepted meaning of that term. It provides for student-faculty co-operation in the administration of extra-curricular activities and in the solution of school problems. Its object is to develop true social consciousness, and to emphasize the importance of co-operation to the end that good citizenship may be realized. All the various school organizations—athletic association, literary societies, school paper, musical organizations, etc.—are centered in and directed by the Students' Association. The work of the association is handled primarily by "boards." No plan devised by any board is put into execution except upon the approval of the faculty adviser of that board.

The executive board is known as the Booster Board. In its organization a definite attempt is made to foster leadership based upon real ability. The writer maintains that a fundamental weakness in current practice in training for citizenship is that the rôle of leadership is not properly emphasized. No special provision is made for the training in leadership of the talented pupil. It no more follows that superior ability guarantees leadership than that leadership is proof positive of superior talent. Many a potential leader of superior talent is a worker in the ranks simply because he lacked opportunity for training in leadership. On the other hand, in the rank of leaders may be found the leader with only mediocre ability simply because favorable circumstances have trained him for leadership. Both society and school are equally open to the indictment that the individual of superior talents is not properly recognized and his achievements are not adequately rewarded.

As educators, we must frankly face the fact that both in a democracy and in an autocracy the rulers are a group of leaders, the point of difference being that in the former the leaders are directly responsible to the people. In either case the type of leader—shaped by his ability, ideals, and standards—is a dominant

factor in determining the type of government. Having its roots in the half-truth that all men are created equal, and nourished by doctrines of socialism, the notion that leaders are superfluous is widely held by certain classes of citizens.

To correct this impression; to emphasize the necessity for real leadership based on ability; to teach the importance of choosing wisely talented leaders imbued with the ideal of service; to teach that the best citizen is the one who renders the best service to his fellows; to foster sentiments of loyalty, fair play, and social responsibility; and to provide *training in leadership and afford practice in perfecting habits of citizenship* should be the function of any comprehensive scheme to teach well the business of being a good citizen.

The attempt to recognize the rôle of leadership in training for citizenship is the unique feature of the Devils Lake High School Students' Association; it is this that differentiates it from various other students' associations organized to secure the participation of pupils in school affairs. Largely through the executive board, the heart of the association, the following functions of the organization are realized: to unify the various student activities; to promote and foster democratic pupil-participation in school affairs; to develop loyalty and proper school spirit; and in every way to equip students for the duties of future citizenship. The Booster Board co-operates with the following boards, chairmen of which it elects from its own membership:

a) Finance Board. Membership: Four class treasurers, Students' Association treasurer, and the treasurers of the athletic, social, and literary boards. Also, commercial instructor and faculty business manager. Duties: This board exercises supervisory power over all school funds. It draws up and has printed all necessary vouchers needed for the efficient handling of all school money.

b) Athletic Board. Membership: President of Students' Association, treasurer of Students' Association, football manager, basket-ball manager, track manager, manager of girls' athletics, boys' athletic coach, and the president of the athletic association. This board, whose duties are of a general nature, supervises all matters pertaining to athletics in Devils Lake High School.

Literary Board. Membership: The secretary of each literary society, four other members (two elected from each society), two faculty members (appointed by the superintendent of city schools and high-school principal), and the editor-in-chief of the high-school paper. Duties: Supervision over all activities of a literary or musical nature. This board is definitely charged with the responsibility of initiating from time to time, as conditions warrant, plans for school plays, operettas, public concerts, declamation contests, and school debates, to the end that the greatest possible number of students may be stimulated to exercise any talents along these lines.

Social Board. Membership: Two members elected from the Senior class, and one from each of the other classes. Faculty adviser appointed by the superintendent of city schools and principal of high school. Duties: This board is charged with the responsibility of developing and fostering proper democratic spirit and social life among all of the students. To this end a definite constructive social program is planned. It is also the function of this board to welcome new students, to assist in their adjustment to a new environment, and to acquaint them with the traditions, ideals, and spirit of the school. It is also the special duty of this board to see that pupils who are ill are remembered with courtesies by their schoolmates.

Scholarship Board. Membership: Four class secretaries, one member from each class, selected on basis of highest scholarship for the preceding year, president of the Students' Association, and the high-school principal, adviser. Duties: To co-operate in every way with the faculty to raise the standard of scholarship in the school; to co-operate in the enforcement of any rule governing participation in extra-curricular activities. The secretary of each class keeps on file in the principal's office a record of the scholarship standing and the extra-curricular activities of each student in his class; graphs showing the comparative rank in scholarship of each class are prepared each six weeks.

Inasmuch as the Booster Board is the heart of the association, and since it is in certain respects unique, the part of the constitution providing for that board is submitted as follows:

Section 1. The principal or executive board of the association shall be known as the Booster Board.

Sec. 2. Duties:

a) This board is charged with the definite responsibility of creating and fostering the right school spirit and to this end definite campaigns shall be planned.

b) This board shall from time to time call mass meetings to boost for a bigger and better Devils Lake High School.

c) The Booster Board shall elect from its own membership chairmen for all other boards.

d) The Booster Board shall have power to initiate from time to time as conditions warrant certain features of student control, which shall be approved by the Students' Association and the high-school principal.

Sec. 3. Membership: Not to exceed 8 per cent of total high-school enrolment.

a) Members of this board shall be elected by ballot from nominees submitted by the faculty. A ballot shall be prepared containing the names of the candidates, and each member of the Students' Association shall vote for the candidates whom he believes properly qualified for, and worthy of membership on, said Booster Board. A vote for a candidate shall be indicated by an "X" placed after said candidate's name.

b) Two-thirds of the total vote cast shall be required for election, provided, however, a vote of *four-fifths* of the total vote cast shall be required for the election of any candidate whose average scholastic standing is below 85 per cent but not less than 80 per cent; provided further that for any candidate whose average scholastic standing is less than 80 per cent a vote of *nine-tenths* of total votes cast shall be required for election.

Sec. 4. Nominations:

a) Nominations are to be made on the basis of *scholarship* and *leadership* as manifested in extra-curricular activities.

b) No pupil shall be eligible to membership on Booster Board who has not been a student in Devils Lake High School at least one full school year.

c) No pupil shall be eligible for membership on Booster Board who has not maintained for all subjects pursued in high school an average standing of at least 80 per cent; with the exception, however, that a pupil whose average standing is less than 80 per cent, and who has been regularly enrolled in Devils Lake High School two or more years and who has shown *distinct improvement* in scholarship during the current or preceding year, and who has shown *conspicuous* evidence of leadership, *may* be nominated and is eligible for membership on said board.

d) All Juniors, not members of Booster Board, having maintained during the first two and one-half years of the high-school course an average standing of 88 per cent *shall* be nominated for membership on said board.

e) All Sophomores, not members of Booster Board, who have maintained during the first one and one-half years of the high-school course an average standing of 90 per cent *shall* be nominated for membership on said board.

f) Nominations for Booster Board shall be made so as to maintain the percentage of membership of said board, by classes, roughly, as follows: Seniors 40 per cent; Juniors 30 per cent; and Sophomores 30 per cent.

Sec. 5. The annual election of Booster Board members shall be held on the third Friday of the last six-weeks period of the school year. Special elections to fill vacancies in the board may be held at any time.

Sec. 6. Vote of confidence: The names of members of the Booster Board shall be presented to the Students' Association at the regular Booster Board election for the vote of confidence or approval. Any member who receives less than two-thirds of total vote cast shall be required to resign immediately.

From the above it is evident that the Booster Board is more than an executive board; it is an honor society. This honor society differs from the traditional honor society which selects from a school, presumably, the ablest members of the group, tags them, banquets them, and then ceases to function, existing for its members and their honor only. The honor society in Devils Lake High School selects the ablest pupils, based on both scholarship and leadership, and provides them opportunity to exercise superior talents in the interests of their school to the end that good citizenship may be developed. It is not an end in itself. It exists not for its members and their honor, but for their school and its honor.

The final measure of the merit of the association is the work performed. Since the organization has been in operation only about one year, final conclusions cannot be drawn. However, its success may be roughly judged by some of its works.

The Finance Board has devised a constructive plan for the handling of all school money from whatever source. The treasurer of the Students' Association is custodian of all funds from various organizations and classes. He keeps a separate account with each class and the various boards, and issues checks only on order of the treasurers authorized by their respective board or classes. All bills except those of the various classes must be approved both by the proper board and by the board's faculty adviser. The necessary order is then made out by the treasurer

of the board, and together with the bill is presented to the Students' Association treasurer, who issues the check which is attested by the high-school principal. The amount paid out is charged to the proper account. The accounts of all treasurers must at all times balance with the books of the Students' Association treasurer.

Money realized through the activities of any organization is paid to the treasurer of the Students' Association and by him credited to the proper board or class. Funds obtained from any function sponsored by the school as a whole without reference to any particular organization are apportioned by the Finance Board to the various boards according to their respective needs.

The Literary Board is actively interested in increasing the efficiency of the two literary societies; excellent programs are being given every alternate week. Under the direction of this board a high-school paper is published every three weeks. Plans are being made for an operetta and a series of one-act plays.

The Booster Board has done some excellent work, and as a result the spirit of the school is splendid. In the city clean-up campaign last spring this board co-operated with the local Commercial Club by offering prizes in the various grades from the fourth to twelfth for the best essays on "The City Beautiful." Four-minute talks on this subject were made by members of the board in each grade and the high school. During the last semester this board successfully supervised the largest study-hall period of the day. At the present time a series of programs is sponsored by this board for fostering the right school spirit. A program is planned on each of the following subjects: (1) the spirit of enthusiasm, (2) the spirit of optimism, (3) the spirit of courtesy, (4) the spirit of co-operation, (5) the spirit of toleration, (6) the spirit of fair play, (7) the spirit of honesty, (8) the spirit of industry, (9) the spirit of perseverance—determination, (10) the spirit of loyalty, (11) the spirit of success.

The students are enthusiastic over the association, and under the stimulus afforded assume their full share of responsibility in solving school problems. The spirit is fine because the pupils feel that the school is their own.

THE USE OF THE NORMAL CURVE OF DISTRIBUTION IN ESTIMATING STUDENTS' MARKS

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The normal curve of distribution is a graphical representation of a series of scientific measurements. The distribution of maple leaves according to their width is a familiar illustration. The conditions of a scientific curve are that the group be sufficiently large, the units not selected, and the characteristic capable of scientific measurement. A necessary feature of such a curve is a base line graduated on the basis of the unit of measure used. This last fact seems to be disregarded at times by educators in the use of this curve.

What does the normal curve of distribution show? That the same forces applied to the same situation tend to produce the same result. Applied to a school system, it shows from the teacher's point of view to what extent her efforts have been evenly distributed throughout her instructional groups. From the pupil's point of view it shows the relative position of the pupil with reference to his group. From the point of view of neither does the curve, in the absence of a unit of measure, indicate either quantitatively or qualitatively the character of the work done.

The assumption is sometimes made by educators that curves which are similar in form are identical in value. It is conceivable that the curves showing the relative heights in inches of 10,000 Filipinos and 10,000 Americans would be similar in form, but no one would say that they portrayed identical situations. Whatever the extremes in height in each group, it is a foregone conclusion that the shortest man in the Filipino group would be considerably shorter than the shortest man in the American group. Similarly, the tallest man in the Filipino group would not be equal in height to the tallest man in the American group. Nor, if a and a'

represented two individuals in the same relative position of each of the two groups, would any military officer undertake to form a human equation between the two. Curves are identical when they occupy the same position not only vertically, but also horizontally, with reference to the base line.

Bearing in mind the difference between similar and identical curves, we may make comparisons between any two curves constructed on a common base line with a common unit. But in the absence of a common unit of measure, the curve of distribution does not furnish a basis of comparison either (a) between general situations in two groups, or (b) between two individuals in the same relative position in two groups.

Applied to the work of the classroom, this means that in the absence of a common unit of measure the curve of distribution does not furnish a basis of comparison either of the work of one teacher with that of another, or of the work of one pupil with the work of another pupil in the same relative position in another group.

Why this very commonplace statement? Because teachers are asked to make such curves in the absence of a common unit of measure, to make comparisons of work done by means of these curves, and to rate pupils on the basis of such comparisons. Teachers are instructed to classify their pupils in any working group as follows: to give a rating of "E" to the lowest group, which shall contain a maximum of 12 per cent of the entire group; to give a rating of "D" to the next group, which shall contain a maximum of 22 per cent; a rating of "C" to the next group, which shall contain a maximum of 50 per cent; a rating of "B" to the next, which shall contain a maximum of 22 per cent; a rating of "A" to the highest group, which shall contain a maximum of 12 per cent of the entire group. All but the lowest group shall *pass*.

Such a relative distribution can certainly be made. But the question concerns the wisdom of making this relativity the basis of the pupils' ratings. What is the meaning of the word *pass* in a system of schools? Is it a relative term only? Does it raise the question only of the relative position of a pupil in his own group, or of his position relative to pupils in another group?

Consider a spelling situation as follows: In class "A" there are 200 pupils.

No. of Pupils	No. of Words Misspelled
6	97
9	95
10	90
10	85
15	80
15	75
20	70
30	50
20	30
15	25
15	20
10	15
10	10
9	5
6	2

In class "B" also composed of 200 pupils:

No. of Pupils	No. of Words Misspelled
6	90
44	60
100	50
44	40
6	5

Suppose now that the teacher of each group distributes his marks on the basis of a normal curve of distribution and gives a rating of "E" to the lowest 3 per cent, a rating of "D" to the next 22 per cent, a rating of "C" to the next 50 per cent, a rating of "B" to the next 22 per cent, and a rating of "A" to the highest 3 per cent. A pupil would receive a rating of "E" on the basis of 97 misspellings if he happened to belong to group "A," but 90 misspellings would give him "E" in group "B." Similarly, a range of 80 to 95 misspellings would give him "D" in the one group, while 60 misspellings would give him the same rating in the other group. A range of 25 to 75 misspellings would rate him "C" in one, while 50 misspellings would give him the same rating in the other group. To receive "B" in the one he might have from 5 to 20 misspellings while "B" in the other means 40 misspellings. Two misspellings in the first would rate him "A,"

while he would be allowed five misspellings for the same rating in the second. But group "A" and group "B" may represent a sixth grade in one part of the city and a sixth grade in another part of the city, or a slow and a fast division in any high-school subject.

Certainly no teacher would justify the relative ratings growing out of such a situation. When one remembers that in the average school there can be no scientific gradation of the base line upon which graphs are constructed, the uselessness of a normal distribution curve to determine pupils' ratings becomes very evident.

An illustration of a scientific grouping of individuals would be a curve, or a series of curves, showing the distribution of pupils taking an intelligence test. Even here the significant fact is not the pupil's relative position in the group. Position in the group is the effect, of which the cause is the score upon which that position is based. Similarly, the proper basis of rating pupils is achievement measured in terms of an objective score. Inasmuch as the curve is based on the score, the curve loses its significance for the purpose of rating pupils.

In any community where pupils' ratings are determined on the principle of relativity in a group, two effects may soon be traced. "Curing" retardation becomes a simple process of manipulating graphs, and teachers will be sure to show a low percentage of failures regardless of the quality of the work done.

The statement that pupils' ratings should be given in terms of achievement measured by an objective score in values involves a course of study definitely organized in units having specific aims and provided with objective tests to measure the extent to which these aims have been attained. *Pass* now means moving over a definite path in the course of study. Everybody will *pass*, but some will pass faster and farther than others.

What is the significance of the normal curve in the work of the public schools? So far as the "school-for-everybody" theory prevails, the curve is useful in determining the proper relation between the course of study and standards of attainment. Manifestly, so far as the community compels attendance in school, "everybody" has a right to pass at a normal rate of speed. But

the rating of any pupil will depend on his score scientifically determined and not on his relative position in a group. All of one group may pass a given point in a given time, whereas it might be entirely within reason to suppose that none of another group would pass that point in the same time.

Somewhere after sixteen years of age the "school-for-everybody" theory breaks down. Certainly no one would argue that the standards in a medical school should be adjusted to the capacity of "everybody" found among pupils of compulsory school age. That is, the time comes somewhere in our course of education when standards are determined by conditions external to the group. If we grant that this is true in the professional schools, we must also grant that it is true in at least part of the work of preparation for admission to these professional schools.

There can be only one result in the application of the "school-for-everybody" standard to all high-school subjects—the lowering of scholarship in the high school. In the judgment of the writer, failure to note the limitations of the "school-for-everybody" theory has done much to lower scholarship standards in our high schools and has exerted a noticeable influence on scholarship standards in our colleges.

It seems to the writer that the following conclusions are warranted by an analysis of the facts: (1) Pupils' ratings should be stated in terms of achievement, measured by objective standards, and not in terms of relative standing in a group. (2) So far as the "school-for-everybody" theory prevails the curve of distribution is significant in working out the proper relation between the course of study and satisfactory standards of achievement. (3) The curve has absolutely no value for comparing teachers or pupils, except so far as the base line is divided by scientific units objective in character. (4) High-school standards are determined partly by conditions external to the group.

The purpose of this discussion is not to try to prove that all of the work of the teacher is in the realm of science, but rather to emphasize the importance of assuming a scientific attitude on the part of the teacher. When scientific methods are applied to education, we may safely expect the following results: (1) There

will be the advantage which always comes from clarity of purpose and definiteness of program. (2) The proper basis will have been laid for school organization. (3) We shall have effective tools to measure the progress of the pupil. (4) The program will be more flexible. It will be easier to treat individual differences. The danger lies, not in promoting a child who is "short," but in promoting him and not knowing in what respects he is "short." (5) Pupils will have a tremendous incentive to work because they can be shown "what they must do to be saved." (6) Such a program will recognize the fact that much of the finest work of the schools cannot at present be measured and therefore no attempt at rating such work should be made.

The present method of rating English in our high schools is an illustration of the inconsistencies that grow out of present custom. The writer finds it utterly impossible as the principal of a high school to interpret to his son as a pupil, or to himself as a father, any rating in English which the son may receive. The application of the principles advocated in this paper would at once cause a differentiation between spelling, development of vocabulary range, thought interpretation, written composition, oral expression, and literature. There would be a definite course in each department marked off by graded units (except probably in literature). These gradations would not necessarily coincide with the present division into Freshman, Sophomore, Junior, and Senior English. Each pupil would be able to determine for himself just how far he had advanced in the course, and each rating could be interpreted in terms of a score obtained in a scientific way.

THE STATUS OF TEACHERS IN JUNIOR HIGH SCHOOLS

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This is a study of certain facts concerning the organization, administration, and teaching staff of junior high schools, on the basis of data which were obtained by questionnaires sent to cities of different sizes in every state of the country. Of the reports returned 99 representing 36 states were of such a character as to permit satisfactory interpretation. In addition, 36 questionnaires were returned with the statement that the cities in question had no junior high schools, though in several cases it was stated also that junior high school buildings were under construction or were to be constructed soon.

GRADE COMBINATIONS

The returns show that approximately two-thirds of the junior high schools reporting were of the three-grade type, 63 comprising Grades VII-VIII-IX and one comprising Grades VI-VII-VIII, while the remaining one-third were, with one exception, of the two-grade type, comprising Grades VII-VIII, or in one case Grades VIII-IX. There is abundant evidence in the correspondence that the two-grade type is not the type eventually desired. Most of the two-grade schools are to be considered but temporary types, their present status being due to one or more of the following facts: (a) the junior high school system has just been organized and next year will retain what is then the ninth grade; (b) existing building conditions preclude the organization of a three-grade school; (c) college-entrance requirements have not yet been adjusted to meet the newer organization; (d) state school laws have not yet been adapted satisfactorily. There can be no doubt of the tendency toward the three-grade junior high school comprising Grades VII-VIII-IX.

HOUSING

The figures concerning the housing of junior high schools indicate the following facts:

1. The tendency is toward the housing of junior high schools in separate buildings, though of the 99 schools reporting only one-half are thus housed.

2. Of junior high schools of the three-grade type one-half are housed in separate buildings, 22 per cent with the elementary grades, and 27 per cent with the senior high schools. Strangely enough, the tendency toward separate buildings for the junior high schools does not appear marked until schools of 700 pupils are reached, and, per contra, schools of under 300 pupils do not show any marked tendency toward housing with the senior high school.

3. Of junior high schools of the two-grade type there is a greater tendency toward housing with the elementary grades, 36 per cent falling in that class, while 18 per cent are housed with the senior high school, and 46 per cent are housed separately.

4. In many cases building conditions rather than educational policies have been the determining factors affecting the housing of the junior high school.

THE PRINCIPAL

The returns also showed the number of junior high schools which have separate principals, the number in which the principal of the junior high school is also principal of the elementary grades, and the number in which the principal of the junior high school is also principal of the senior high school.

1. Of the junior high schools of the three-grade type, nearly two-thirds have separate principals, one-fifth have principals who also are principals of the elementary schools attached, and one-sixth have principals who also are principals of the senior high school.

2. Of the junior high schools of the two-grade type, more than one-half have separate principals, 30 per cent have principals who are also principals of the elementary schools attached, and only 12 per cent have principals who also are principals of the senior high schools.

3. Of all 99 junior high schools reporting, nearly two-thirds have separate principals, nearly one-quarter have principals who also are principals of the elementary schools attached, and 14 per cent have principals who also are principals of the senior high school.

4. The tendency is obviously toward a separate principal for the junior high school. Particularly noticeable is the relatively small number of junior high schools having as principals persons who are also principals of the senior high schools, even where the two high schools are housed in the same building.

SEX OF TEACHERS

In Table I are presented figures showing the numbers of men and women teachers. They indicate that of 1,518 junior high

TABLE I
THE SEX AND EXPERIENCE OF THE TEACHERS

TYPE OF SCHOOL	ENROLMENT OF SCHOOL	NUMBER OF TEACHERS		TEACHERS HAVING AT LEAST ONE YEAR'S EXPERIENCE PRIOR TO SEPTEMBER, 1920			
				Elementary Grades		Junior High School	Senior High School
		M	F	I-VI	VII-VIII		
VII-VIII-IX	101-300.....	28	101	41	31	46	40
	301-500.....	27	142	104	65	114	77
	501-700.....	37	193	41	84	110	53
	Over 700.....	103	482	308	348	499	169
	Total.....	195	918	494	528	769	339
	Percentage of all	17	83	44	48	69	30
VII-VIII	Less than 100....	1	4	1	1	3	3
	101-300.....	12	60	56	59	36	28
	301-500.....	28	161	90	90	138	28
	501-700.....	11	55	46	24	50	15
	Over 700.....	5	27	16	6	21	20
	Total.....	57	307	209	180	248	94
	Percentage of all	16	84	57	50	68	26
	Grand total (1,518)*.....	259	1,259	723	735	1,044	441
	Percentage of grand total...	17	83	48	49	69	29

* Includes figures for three additional schools of varying types.

school teachers reported, 83 per cent were women and 17 per cent were men, the proportions being approximately the same for junior high schools of the various types. The proportion of men teachers in the junior high schools is small, being but slightly above that in the elementary schools and approximately one-half of that in the high schools of the country. Apparently the argument sometimes adduced for the junior high school, that it would provide more male teachers, has as yet to justify itself.

EXPERIENCE OF TEACHERS

Table I also shows the earlier teaching experience of junior high school teachers.

1. Of teachers now in junior high schools of the three-grade type, 44 per cent have had previous experience in Grades I-VI of the elementary school, and 48 per cent have had previous experience in Grades VII-VIII of the elementary school, while 30 per cent have had previous experience in the senior high school, and 69 per cent have had experience in the junior high school before this year. Considerable overlapping is obvious.

2. Of teachers now in junior high schools of the two-grade type, 57 per cent have had previous experience in Grades I-VI of the elementary school, and 50 per cent have had previous experience in Grades VII-VIII of the elementary school, while 26 per cent have had experience in the senior high school and 68 per cent have had experience in the junior high school before this year. A slightly greater tendency to draw teachers from elementary-school work is observable in junior high schools of the two-grade type.

3. Particularly noticeable is the relatively small proportion of teachers who have had previous experience in high-school teaching before joining the staff of a junior high school—30 per cent for three-grade junior high schools and 26 per cent for two-grade junior high schools. Three-fourths of the teachers who have had senior high school experience were found now teaching in junior high schools of the three-grade type.

4. Of the 441 teachers reported as having had senior high school experience, 222 (or 50 per cent) had taught in the senior high school only, 77 (or 18 per cent) had taught in the senior high school and in

Grades VII and VIII, 75 (or 17 per cent) had taught in the senior high school, in Grades I-VI, and in Grades VII and VIII, while 67 (or 15 per cent) had taught in the senior high school and in Grades I-VI.

Another tabulation not presented in this article indicates the experience in the junior high schools of the teachers now working in them.

1. Of the 1,183 teachers reported, 27 per cent had had no previous experience in teaching in junior high schools and of these 51 (or 4.3 per cent) had had no previous experience in teaching at all. More than one-half of all the teachers had had not more than two years of experience in junior high school teaching.

2. The median experience of teachers in junior high school work is for the three-grade school 1.6 years, for the two-grade school 1.3 years, and for all schools reporting 1.5 years. It should be noted that these figures are for experience in the junior high school only. Apparently, the teachers chosen for junior high school work were those of successful previous experience either in the elementary school or in the high school.

Correspondence clearly indicates that at least in the beginning of the junior high school the practice has been to select well qualified elementary-school teachers to form the junior high school teaching staff.

EDUCATION OF TEACHERS

In Table II are presented figures indicating the character of the education of junior high school teachers, indicating that:

1. A small proportion only (9 per cent) of the junior high school teachers are without college or normal-school training.

2. In schools of the three-grade type, 42 per cent of the teachers are college or university graduates, and 18 per cent have attended college but have not been graduated—60 per cent thus having had a complete or partial college training. Corresponding figures for schools of the two-grade type are for college or university graduates 29 per cent, for college non-graduates 12 per cent, total 41 per cent. Apparently the three-grade junior high school, as would be expected, draws a larger proportion of college men and women.

3. Approximately 5 per cent of the teachers in junior high schools are both college or university and normal-school graduates, 72 teachers belonging to this group.

TABLE II
THE EDUCATION OF THE TEACHERS

TYPE OF SCHOOL	ENROLMENT OF SCHOOL	CHARACTER OF EDUCATION					
		High School or Less	College or University		Normal School		Graduate Study*
			Graduate	Non-Graduate	Graduate	Non-Graduate	
VII-VIII-IX	101-300.....	7	55	32	55	13	33
	301-500.....	11	74	47	89	10	34
	501-700.....	18	80	17	90	13	44
	Over 700.....	54	254	109	197	30	201
	Total.....	90	463	205	431	66	312
	Percentage of all	8	42	18	39	6	28
VII-VIII	Less than 100....	1	2	.....	3	.....	.....
	101-300.....	8	18	11	43	3	7
	301-500.....	23	44	26	90	4	39
	501-700.....	12	18	3	30	9	18
	Over 700.....	.....	25	5	2	.....	17
	Total.....	44	107	45	168	16	81
	Percentage of all	12	29	12	46	4	22
	Grand total (1,518)†.....	137	587	258	619	85	401
	Percentage of grand total...	9	39	17	41	6	26

† Includes figures for three additional schools.

* Largely summer courses and extension courses.

Correspondence indicates that the common standards for the education of junior high school teachers are normal-school or college graduates for the seventh and eighth grades and college graduates for the ninth grade, with a desire to secure for all junior high school work teachers who have had both normal-school and college training.

SALARIES OF TEACHERS

In Table III are presented figures showing the salaries of junior high school teachers in schools of various types and sizes. They

show that the median salary of teachers in the three-grade junior high school is \$1,600; in the two-grade junior high school, \$1,425; and in all junior high schools reporting, \$1,541.

TABLE III
THE SALARIES OF THE JUNIOR HIGH SCHOOL TEACHERS

SALARIES	VII-VIII-IX				VII-VIII					VII-VIII-IX	VII-VIII	* GRAND TOTAL	VII-VIII-IX	VII-VIII	PERCENTAGE OF GRAND TOTAL
	101-300	301-500	501-700	Over 700	100	101-300	301-500	501-700	Over 700	Total No.	Total No.		Per-centage	Per-centage	
Less than \$1,000.	2	1	16	15	.....	4	2	.....	1	34	7	42	3	2	3
1,000-1,100	15	10	8	44	.....	17	1	7	16	86	41	133	7	13	60
1,101-1,200	21	17	11	11	3	7	4	3	8	60	25	91	5	8	8
1,201-1,300	12	13	34	13	.....	6	24	19	.....	72	40	138	6	15	8
1,301-1,400	18	24	30	12	1	12	32	2	5	93	52	150	8	16	10
1,401-1,500	20	32	82	30	.....	7	53	1	.....	173	61	235	15	10	16
1,501-1,600	18	28	52	19	.....	3	40	5	.....	117	48	170	10	15	11
1,601-1,700	2	28	20	11	.....	4	7	2	.....	61	13	80	5	4	5
1,701-1,800	6	20	15	71	1	1	3	3	1	112	9	123	10	3	8
1,801-1,900	3	9	16	15	.....	.....	.....	.....	.....	43	1	44	4	.....	3
1,901-2,000	6	11	5	31	.....	2	2	6	.....	53	10	63	5	3	4
2,001-2,100	.....	4	2	15	.....	.....	1	.....	.....	21	1	22	2	.....	1
2,101-2,200	2	1	4	44	.....	.....	.....	.....	.....	51	.....	51	5	.....	3
2,201-2,300	1	.....	5	18	.....	.....	.....	.....	.....	24	.....	24	3	.....	1
2,301-2,400	2	1	.....	127	.....	.....	1	.....	.....	130	1	132	11	.....	0
2,401-2,500	2	1	.....	7	.....	.....	2	.....	.....	10	2	12	1	.....	1
More than 2,500.	1	.....	1	0	.....	.....	.....	1	1	11	2	14	1	.....	1
Total	131	200	310	501	5	63	172	50	32	1,151	322	1,514	.....	.....	.....
Median salary.	1,430	1,547	1,507	1,953	1,250	1,317	1,493	1,320	1,144	1,600	1,425	1,541	.....	.....	.....

* This includes 3 additional junior high schools of varying types.

TEACHERS' SPECIALIZATION

Figures showing the numbers of teachers teaching one, two, three, or more subjects indicate that: (1) the percentage of teachers teaching one subject only in schools of three-grade type is 72, and in schools of the two-grade type 62. For all schools reporting the percentage is 69. (2) For teachers of two or more subjects there appears to be no generally accepted combination, except for such natural combinations as French and Spanish, history and civics, stenography and typewriting.

OVERLAPPING OF INSTRUCTION

In Table IV are presented figures showing the numbers of teachers teaching in the junior high school only, in the junior and senior high schools, and in the junior high school and in elementary grades. They show a distinct tendency to observe the integrity

of the teaching staff of the junior high school, 87 per cent of all the teachers reporting having work in the junior high school only. Particularly noticeable is the relatively small number of teachers, 4 per cent only, teaching both in the junior high school and in the elementary school.

TABLE IV

THE NUMBER OF TEACHERS (1) TEACHING IN THE JUNIOR HIGH SCHOOL ONLY, (2) IN THE JUNIOR HIGH SCHOOL AND ELEMENTARY GRADES, (3) IN THE JUNIOR HIGH SCHOOL AND IN THE SENIOR HIGH SCHOOL*

SCHOOL ENROLMENT	VII-VIII-IX			VII-VIII			ALL TYPES†		
	J.H.S. Only	J.H.S. and El. Sch.	J.H.S. and S.H.S.	J.H.S. Only	J.H.S. and El. Sch.	J.H.S. and S.H.S.	J.H.S. Only	J.H.S. and El. Sch.	J.H.S. and S.H.S.
Less than 100 . . .	1	.....	2	5	.....	5	6	.....	7
101-300	73	10	45	69	21	9	149	31	55
301-500	133	7	65	206	18	19	353	25	84
501-700	285	9	18	62	2	.....	366	11	18
Over 700	577	2	.....	51	.....	.....	628	2	.....
Total (1,735) . . .	1,069	28	130	393	41	33	1,502	69	164
Percentage	87	2	11	84	9	7	87	4	9

* Special teachers of music and drawing are included in the figures for junior high school only.

† Includes figures for three schools of types other than the VII-VIII-IX and VII-VIII.

SUMMARY AND CONCLUSIONS

1. There is a decided tendency toward the three-grade junior high school comprising Grades VII, VIII, and IX. Most of the two-grade junior high schools now found are to be considered as of temporary status destined ultimately to become three-grade schools (a) by the retention of the ninth grade next year, (b) as soon as building conditions permit, (c) when college-entrance requirements are adjusted to the new system, (d) when certain state laws are adapted to the new plan.

2. At present about one-half of the junior high schools are housed either with elementary grades or with the senior high school. The limitations of building accommodations are the largest factor determining the present status, though there is good reason for combination schools in smaller communities.

3. In 62 per cent of the schools the junior high school is under the charge of a separate principal. In many cases a separate

principal for the junior high school is found even where the junior high school is housed with the elementary school or with the senior high school.

4. The proportion of men teachers in the junior high school reported is very small, being but slightly above the proportion of men teachers in the elementary schools of the country.

5. The majority of junior high school teachers have had their experience in the elementary grades, 29 per cent only having had experience in the senior high school. About two-thirds of the teachers now working in the junior high school have had experience in that type of school before this year. The median length of experience in the junior high school itself is about one and one-half years.

6. About four-fifths of the junior high school teachers are either college or normal-school graduates.

7. The median salary of junior high school teachers is \$1,541. The median salary in the three-grade junior high school is nearly \$200 above that in the two-grade school, the difference being due in part, no doubt, to the salaries of teachers in the ninth grade of the three-grade school.

8. Most teachers in the junior high schools are specialists in the sense that they teach one subject only. Few subject correlations appear standard. A relatively small proportion of junior high school teachers teach also in the elementary grades or in the senior high school.

Educational Writings

REVIEWS AND BOOK NOTES

The progress of education.—Within the past generation a number of general histories of education have been published. The publication¹ under review is notable because it is the first to depart considerably from conventional standards and points of view. Professor Cubberley states in his Preface that he has "not tried to prepare another history of educational theories. Of such we already have a sufficient number. Instead, I have tried to prepare a history of the progress and practice and organization of education itself, and to give to such a history its proper setting, as a phase of the history of the development and spread of our Western civilization." It should be a source of great satisfaction to those interested in the real history of education that at last we have formal acknowledgment by a recognized leader of the profession that the history of educational theories bears essentially the same relation to educational history as does the history of economic theories to economic history, or the history of political theories to political history, or the history of theology to religious history.

The work is in four parts: first, the ancient world, with chapters on Greek and Roman education and the contribution of Christianity; second, the medieval world, with accounts of education in the early Middle Ages, of influences promoting the revival of learning, and of the rise of the universities; third, the transition from medieval to modern attitudes, with chapters on the revival of learning and the educational results of this movement, as well as of the Protestant revolts among the Lutherans, Anglicans, Calvinists, and Catholics, in Europe, England, and America; other chapters are on the rise of scientific inquiry and scientific method in the schools, and on the theory and practice of education in the middle of the eighteenth century; fourth, modern times, with chapters on forces influencing education in the eighteenth century, national organization of education on the continent and in England and America, new theories and subject-matter of the elementary school, the American struggle for free state schools, and new conceptions and tendencies in the nineteenth and twentieth centuries.

¹ ELLWOOD P. CUBBERLEY, *The History of Education*. Pp. xi+849. *Readings in the History of Education*. Pp. xxi+684. Boston: Houghton Mifflin Co., 1920.

This work is too voluminous and space is too limited to discuss matters of detail. We can only comment on the larger features and important characteristics, and give a few illustrations. We may note at the outset that the volume is designed as a textbook with the usual limitations characteristic of this form of exposition. Most of the subject-matter is already more or less familiar, drawn from secondary authorities, and without specific reference to authorities for facts or for numerous broad and sweeping generalizations and inferences. The material is drawn very largely from English and American writers or matter printed in the English language. There is little evidence that the author has used much of the monographic studies by French, German, Italian, and other European writers, though there is a very considerable literature on the subject for ancient, medieval, and modern education. There is little or no attempt to evaluate the sources of information, or to apply in general what is known as the historical method among modern historians. What we do have is a presentation and reorganization of the better-known facts of educational history in certain selected countries, written from a new standpoint with a new emphasis. And after all, this is about all that one man could do in so large a field of knowledge covering so long a period. With these limitations, the reviewer believes that the author has written the best book yet produced by an American in this field, in spite of further criticisms to follow, by setting forth the most essential facts of educational development in an interesting manner, by giving these facts a better setting than heretofore, and by emphasizing those political, economic, religious, and social forces which have influenced and help explain educational progress or lack of progress.

In matters of detail, and in some cases in matters of larger importance, the author is often in error, since neither he nor anyone can have exact knowledge in so many fields both of the educational and the general history of different countries. For example, the author's treatment of feudal society (p. 165) and conditions as affecting the training of the nobility is quite out of harmony with the best thought on this subject. The feudal system was far from being only "organized anarchy," and it was not the duty of peasants to fight the battles of their lords. Arming the peasants would be much like arming the negro slaves in the ante-bellum period. Again, the description of religious conditions in America (p. 357) is certainly incorrect when he states that "practically all these early religious groups came to America in little congregations bringing their ministers with them." To take only one example, the scarcity of ministers among the German Lutherans and Reformed peoples was notorious up to the Revolution. Again, the author asserts that "the Massachusetts laws of 1642 and 1647 were continued in force" in New Hampshire after separation from Massachusetts (p. 367). This is not true. The act of 1642 was never in force in New Hampshire after the separation, and it was not until 1719-21 that acts were passed that embodied the principles of the act of 1647. It is not true that in "Virginia and the other colonies to the South the no-business-of-the-state attitude toward education by the mother

country was copied." One has only to read the educational legislation of the southern colonies before the Revolution to see how overdrawn this sweeping statement is. Easy generalizations of this sort, unsupported by evidence, so characteristic a feature of textbooks, perpetuate a great deal of misinformation about our educational history. Nevertheless, the reviewer is in agreement with many of the important statements of fact and generalizations. The fact that there are some errors is more than offset by the great number of facts and inferences that are essentially true. The period from 1860 on seems to be inadequately treated from the point of view of a usable text in this important period of educational history. The second volume provides a series of documents from original sources and extracts from secondary sources of great value and interest, particularly from the earlier period. They parallel the text closely and have some of its virtues and defects. The make-up of these volumes is excellent. Numerous illustrations, maps, references to other sources for collateral reading, suggestive questions, etc., are given.

In conclusion, we may say that this work is the best textbook yet produced in this subject, and should be of great value in giving educational history a better standing in the curriculum, and in giving students of education a better knowledge of the forces that have influenced educational progress and of the part that education has played in the progress of civilization.

MARCUS W. JERNEGAN

UNIVERSITY OF CHICAGO

An experimental analysis of reading.—Experimentation in the field of reading is constantly penetrating farther into the details of the reading process. A recent contribution to this line of investigation made by Dr. Buswell¹ is in natural sequence and can be fully appreciated only in connection with the series of experimental studies of reading ("Supplementary Educational Monographs," Vol. I, Nos. 1, 2, 5; Vol. II, No. 4) of which it is a part. But, while practically the same apparatus was used as in former studies, a quite independent phase of investigation was undertaken, and the author has effectively concentrated attention on the next significant problem in the teaching of reading. The significance of the report for secondary schools is accentuated by the fact that twenty-four of the fifty-four subjects were selected from the high-school group, three good readers and three poor readers from each grade.

The monograph leads the reader definitely to the conclusion that the attainment of skill in oral reading is coupled with the ability to keep the eye well ahead of the voice. In all grades the good readers show on the average a wider eye-voice span than the poor readers. Those who have the wider span make fewer errors and show in general more regard for thought units. The author explains this fact clearly: "A subject with a wide span has an

¹ G. T. BUSWELL, *An Experimental Study of the Eye-Voice Span in Reading*. "Supplementary Educational Monographs," No. 17. Chicago: Department of Education, University of Chicago, 1920. Pp. xii+106. \$1.00.

opportunity to interpret the meaning in larger units and is able to get the correct meaning before the voice reaches the points of difficulty." He finds that high-school pupils especially have learned to retard the voice until the eye has gained a certain control of the sentence. He believes, however, that eye-movement bears a closer relationship to meaning than does eye-voice span and recognizes the difficulty of definitely locating a point at which meaning comes into consciousness as related to either. While the monograph is primarily not concerned with silent reading, it was found that those who had acquired wide eye-voice span were also the most efficient silent readers, and the progressive relationship of silent to oral reading is definitely shown.

Rapidity of reading is also found to be correlated with a large span, the number of eye-fixations decreasing as a large eye-voice span is attained. Long fixations are found to be due chiefly to difficulty of words, and the most facile reader will show all the characteristics of immaturity when confronted with extremely difficult material. A possible limitation to the development of the wide span is seen in the fact that regressive eye-movements are characteristic of those who have an extremely wide span.

Some details are omitted which would have added to the strength of the report. For example, it is to be regretted that the high-school pupils were not selected on the basis of objective tests. The casual method used may be a reason why the author fails to find as conclusive distinctions in his experiments with this group as with the elementary-school pupils. It further brings into question his generalization that "even the poor high-school reader does fairly well" and its corollary that the pupil mortality between the elementary and high school is chiefly among the poor readers, unless these are based on some other evidence which he fails to adduce. There are striking examples of subjects who, even though poor readers, show a wide eye-voice span. The reader would like to know in some detail why the wide span was in these cases ineffective or not symptomatic.

In general, however, the methods used are ingenious, the controls well planned and executed, and the whole report well organized to make its purpose effective. The experiment was carried out with enough subjects to give a fairly reliable index of certain differences between good and poor readers, and a general notion of the type of development from the elementary grades to adulthood. The conclusions are carefully drawn. For example, the author does not attempt to relate eye-voice span and good quality of reading as cause and effect, but asserts they are both effects of a general-attention span wide enough to hold a large number of elements in mind at one time.

This report carries the problems of training in reading to a definite issue of methods. Dr. Buswell states that it is not the function of his report "to devise methods of teaching but it is in place here to state that here is a significant factor of reading which is in need of specific training methods. The problem is to devise methods which will develop a habit of pushing the eye farther ahead of the voice in order that there may be interpretation of

meaning in larger units" (p. 63). Members of the teaching force are becoming impatient in their desire to know what some of these authoritative training methods may be, and would earnestly recommend, as does the author himself, a careful training investigation of the extent to which the attention span can be developed or to which it is dependent on factors of native capacity, and still more urgently by what means the widening of the eye-voice span can be best accomplished in the practical school situation. The chief function of the experimenter has been to make clear the need of certain new methods. He must in turn wait upon the inventive genius of those who may meet this need.

Dr. Buswell puts the burden squarely on the elementary grades below the fifth school year, but recognizes the fact that high-school pupils are not too old for benefits to be derived from training. He infers that the wider eye-voice span of the members of the Freshman class was a result of special training which that group had been receiving. It is possible, however, that this training served to so emphasize the individual differences of this group of pupils that the instructors were enabled more readily to select the good readers. At any rate, the high school must hold itself in readiness to contribute its share to the final solution of the teaching problem involved, and all who are interested in the field should make a thorough analysis of this valuable study.

PAUL V. WEST

UNIVERSITY OF WISCONSIN

Education in Ohio.—The chief weakness in our histories of education lies, perhaps, in the inadequacy of their accounts of school practices in the periods treated. We have histories of educational theory that trace the opinions held by educational leaders from Aristotle to John Dewey, but we are left with little knowledge of actual school procedure and of general educational sentiment prior to the present and the immediately past generations.

A recent monograph by Dr. E. A. Miller¹ is the result of an attempt to discover some of the facts as to actual educational conditions from 1803 to 1850 in one of our American states. The book is a study of educational legislation in Ohio for the period named, based chiefly upon the legislative records of the state; but in order properly to interpret the data thus discovered, the author has found it necessary to draw information from many other original and secondary sources.

Dr. Miller has so organized his monograph that the material is grouped into interesting treatises on several phases of the educational development of the state. In one chapter he has traced the evolution of the public-school system in Ohio, including such topics as common-school support, control and supervision, certification of teachers, development of the curriculum, schools

¹ EDWARD ALANSON MILLER, *The History of Educational Legislation in Ohio from 1805 to 1850*. "Supplementary Educational Monographs," Vol. III, No. 2. Chicago: Department of Education, University of Chicago, 1920. Pp. xi+248. \$2.00.

for colored children, and the development of city- and village-school systems. Another chapter shows how the problems growing out of the federal land grants for common schools were handled in this, the first state to face these problems. Still another interesting chapter traces, through the legislation of the state, the development of secondary and higher education. The period covers the time when the chartered academies were most flourishing and the foundations for great colleges and universities were being laid. A complete list of these academies and colleges is given in the chapter and is supplemented in the appendix with a synopsis of each act of incorporation. Other chapters in the monograph show us how Ohio handled the problems of the education of defectives, dependents and delinquents, and the training of teachers.

In Appendix A the author has classified the legislation of the period of his study, presenting abstracts of the more important acts. Appendix B is a page-and-volume index to all the educational legislation of Ohio, 1803-50.

Dr. Miller's work is a valuable contribution to the history of his state and to the history of education in the United States. The fact that Ohio was the first of the states organized from the Northwest Territory, and consequently was compelled to grapple with new educational problems growing out of conditions pertaining to the frontier and out of the management under such conditions of her sixteenth sections and seminary lands, makes the book of special significance and value to all who are interested in the development of our educational institutions and the working out of our educational problems.

W. H. WEATHERSBY

MISSISSIPPI COLLEGE

Special methods in history.—An unusual book of methods¹ from the press of Ginn & Company departs from the traditional theoretical treatment and presents specifically and concretely the problems it attacks. Professor Tryon in his inimitable way has reproduced in this volume many definite suggestions for the teacher of history. Written "in the interest of better history teaching," it will be welcomed by all progressive teachers who are desirous of improving the technique of teaching.

The Preface indicates the purpose of departing from the customary historical treatment and presenting the everyday classroom problems with which the teacher has to deal. The first chapter treats of the history recitation, setting forth practical suggestions which will be helpful to all. Professor Tryon advises the use of ordinary business procedure in the classroom, permitting the pupils to know about the work to be done, the methods to be employed, and the materials to be used. Examples of good recitations are given where the work is well apportioned to include review, advanced assignment, summary, and the next day's lesson. Forms of the recitation receive a discussion which is somewhat limited, especially for the newer types. The

¹ ROLLA MILTON TRYON, *The Teaching of History in Junior and Senior High Schools*. Boston: Ginn & Co., 1921. Pp. v+294. \$1.48. ✓

omission of a treatment of the term "project" is also noticeable in the chapter on "Special Methods of Procedure."

Chapter v presents "Progress within the Subject." This will prove of especial aid to those teachers who have not developed a method of procedure by which there can be a progression in the knowledge of the students. This chapter is followed by chapters on "Written Work," "Measuring the Results of History Teaching," "Library and Collateral Reading Problems," "Current Events," "Planning the Course," and "The High-School History Teacher." A brief review cannot attempt to touch upon the significant phases of each chapter. However, the principles to follow in selecting collateral reading, the plans suggested for conducting current events, and the excellent plea for professional as well as academic training cannot be ignored even in a cursory review.

The chief merit in the book lies in its concreteness through specific illustrations. Professor Tryon does not follow the well-beaten path of telling what ought to be done without suggesting the means of doing it. The style is readable but not ornate. *The Teaching of History in Junior and Senior High Schools* will find many appreciative readers.

BESSIE L. PIERCE

UNIVERSITY OF IOWA

Laboratory work in English composition.—The usual work on English composition is not an attractive document. Custom has made of it a handbook rather than a text. Publishers, seeking primarily a systematic presentation of principles, have been contented if they could obtain this with a reasonable modicum of exercise material. It is left for the teacher to put flesh on the bones of the skeleton.

A new first-year book in junior high school English¹ marks, however, a determined effort to evolve a more teachable organization. The writers have addressed themselves quite clearly to the pupil throughout. The older organization of chapters has therefore given way to one by problems, and principles are developed through their applications. The situations dealt with range from the effective telling of a personal experience and the proper phrasing of a mail order to the editing of a school paper and the dramatization of an interesting story. Under cover of this wide variety of "problems" the working principles of grammar and composition are brought out forcibly in their natural settings.

In each case the first care is to insure that the pupil really feels the need of improvement in the given direction. Examples are cited of a sort most likely to arise in the pupil's own experience. Questions then evoke an appreciation of the characteristics giving superiority to one form over the other. Pupils are led to a critical evaluation of their own habits. Frequently the

¹ THOMAS H. BRIGGS, ISABEL MCKINNEY, and FLORENCE SKEFFINGTON, *Junior High School English, Book I*. Boston: Ginn & Co., 1921. Pp. xiv+399. \$1.12.

point is clinched by anecdote. There follows a wealth of suggestions as to ways in which the pupil may, with interest and profit, put his newly gained insight to immediate use.

The result is a book in a measure approaching the concept of a "laboratory manual" in English composition. The teacher has in convenient form a plan of procedure so carefully outlined as almost to teach itself. Her function will often be that of guiding in the choice of alternatives offered and adapting the task to the special needs of individual and group.

A feature of the book is the Appendix, constituting one-fourth of its bulk. In this has been concentrated much that would ordinarily appear in the body of the text—lists of special faults to be eradicated and exercise material in enunciation, punctuation, spelling, and outlining. One section of sixty pages contains a complete summary of essential grammar, although many instructors will find its terminology disconcertingly novel. The book concludes with a suggestive list of fifty-seven larger projects from which selection may be made as desired.

The book may be cordially commended to the attention of all teachers in seventh- and eighth-grade English classes as well as to those responsible for the selection of textbooks in these grades.

Part-time education.—One of the most important educational problems has long been that of relating school work to the future vocational work of the pupils. California has attempted to solve this problem by means of a Part-Time Education Act. As a result of this act the problems of part-time education have received considerable attention in that state. A bulletin¹ of the University of California presents a discussion of this type of education which is based on wide study and experience.

The author takes the point of view that the success or failure of part-time education depends primarily on the type of co-ordination maintained. The school work of the pupil must be chosen with a view to capitalizing his whole experience, home, occupational, and social. Her study of this problem of co-ordination presents a bibliography of the literature on the subject, describes the general need for co-ordination, offers suggestions upon which a plan of co-ordination may be based, and suggests methods for the discharge of the function. She discusses in detail what she considers the five factors of co-ordination, namely, educational salesmanship, promoting instruction, placement, personal advice and assistance, and community co-operation. Educational salesmanship is the name applied to the work of popularizing part-time education through all the means possible, such as the press, influential citizens, personal letters, civic organizations, and personal conferences.

¹ MARGARET M. ALLTUCKER, *Co-ordination in Part-Time Education*. "Part-Time Education Series No. 4," Bulletin No. 3. Berkeley, California: University of California. Pp. 44.

Under promoting instruction she gives very definite suggestions as to how the actual work of these part-time schools should be carried on. The section dealing with placement tells how surveys of jobs may be made and also how the youths may be fitted to the jobs best suited to them. Regarding personal advice and assistance, definite instances are given of changes wrought in individuals and homes through personal contact with the co-ordinator. Throughout the discussion emphasis is placed on the fact that much of the success of part-time education depends on the character and personality of the co-ordinator. The discussion is brief, but definite and suggestive.

Vocational literature.—The establishment of life-career courses in schools has outsped preparation for it. Teachers and counselors have been at a loss for trustworthy information on the work of life. To meet this need Frederick J. Allen, of the Bureau of Vocational Guidance of Harvard University, has compiled an extended bibliography¹ of vocations.

Sections i-ix deal with the nine great groups of occupations which have been outlined by the Federal Census. In each section are presented the vocations which are most common. In section viii, for example, "Domestic and Personal Service," are found bibliographies of such vocations as barber, bell boy, janitor, waiter, etc. In section vi, "Public Service," are found constable, detective, fireman, mail-carrier, etc. In this way two hundred and sixty-five different vocations are treated. Section x presents a list of general sources of about seven hundred references. Here are given annotations to show the content and value of the various books. Periodical and other references of temporary value are not listed. The fundamental nature of the material should make this guide of great value to all interested in vocational guidance.

Sex problems.—One of the most important problems confronting parents and educators is how to develop among young men and women a proper sex morality. Ignorance and a certain false modesty have characterized the past attitude toward the problem. A publication² of the American Social Hygiene Association presents a discussion of this problem based on the "theory that there is some correlation between knowledge and conduct, that in the long run intelligence and not ignorance about the great and fundamental issues of life will advance human conduct."

The author approaches the problem from the viewpoint of all human appetites, showing how all these appetites must be properly controlled and sublimated if one is to develop strong character and properly perform the

¹ FREDERICK J. ALLEN, *A Guide to the Study of Occupations*. Cambridge: Harvard University Press, 1921. Pp. xiii+183.

² THOMAS WALTON GALLOWAY, *The Sex Factor in Human Life*. New York: American Social Hygiene Association, 1921. Pp. 142.

work of life. The following chapter headings indicate the trend of the discussion: "Appetites and Their Place in Life," "Nature of Sex and Some of Its Effects on Human Behavior," "Directing Appetites through Sublimation," "Practical Aids in Directing and Controlling the Sex Appetite," "Sex and Inheritance," and "Sex and Religion."

The book is written primarily for voluntary discussion groups of young men in colleges and deals directly with the sex factor as related to men. The question-and-answer method is used, which gives the discussion concreteness. The problem of educating younger boys regarding sex matters is considered, as well as the specific problems of the college period. The book will be most useful in the direct manner in which it is intended to be used. It is hardly suitable as a textbook, but will be valuable to teachers in directing their own thinking upon this subject, and in giving them a clearer understanding of their own obligations to young boys in these matters. As an inspiration and guide to serious-minded college men and teachers, this book can be very highly recommended.

Mathematics for secondary schools.—Many new texts and revisions of old ones are being presented for use in schools of secondary grade. Among the books received during the year, the following are representative of the more significant efforts to reorganize the courses in mathematics at this level: *Modern Junior Mathematics*¹ is the third of a series of textbooks designed to cover the work of the seventh, eighth, and ninth grades. The three books aim to teach arithmetic, algebra, geometry, and trigonometry as one subject. The larger part of the third book is concerned with the study of algebra and includes the following topics: positive and negative numbers, the fundamental operations with integers and fractions, simple and quadratic equations, systems of linear equations in two unknowns, and systems containing one linear and one quadratic equation. The graph is used to illustrate the solutions of simultaneous equations.

The remainder of the book contains a brief chapter on the applications of the sine, cosine, and tangent functions; one on the meaning of logarithms and their uses in multiplying and dividing arithmetical numbers; and one chapter on geometry, leading up to the formal demonstrations of theorems on congruent triangles and parallel lines.

At the end of this course the pupil is prepared to take up the study of intermediate algebra or of demonstrative geometry.

Plane Geometry,² a new text by the authors of a well-known algebra series, is an excellent treatment of this subject. Unusual care has been taken to make the definitions, axioms, and proofs scientifically exact. The book contains

¹ MARIE GUGLE, *Modern Junior Mathematics. Book III*. New York: Gregg Publishing Co., 1920. Pp. xiii+241.

² HERBERT E. HAWKES, WILLIAM A. LUBY, and FRANK C. TOUTON, *Plane Geometry*. Boston: Ginn & Co., 1920. Pp. viii+305.

numerous interesting and valuable historical notes. Proof of incommensurable cases of theorems by means of the theorem of limits has been discarded. There are numerous arithmetical applications and exercises for algebraic solution.

The authors appreciate the great difficulty experienced by students in beginning the study of deductive plane geometry. One of the causes for this difficulty is the learner's lack of understanding of the reason for giving logical proof. "To let the student see the reason for mastering the content of each theorem the first theorem is used to prove the second, the second to prove the third, etc." Furthermore, they have endeavored to reduce the usual large number of definitions, axioms, and postulates found in the first pages of the traditional textbooks to a minimum, beginning the first proof on the tenth page.

However, failure to understand the reason for logical proof is not the only cause of the student's inability to enter into the spirit of demonstrative geometry. He needs wide experience with the concepts of plane geometry and a great deal of reasoning of the informal type before he can understand and appreciate a rigorous formal demonstration. Many writers supply this experience in the form of experimental and constructional geometry. The authors defer constructional work to the second book where it is possible to prove that the methods used in the constructions are correct, and employ the strictly logical proof from the beginning. The average student will therefore find the text difficult, but it might work very well for special classes of gifted students.

*A Second Book in Algebra*¹ is a continuation of the authors' *First Book in Algebra*. It is divided into two sections, each supplying a sufficient amount of work for one semester. The first part carries the student over the traditional subjects of algebra through progressions. A discussion of logarithms forms the closing chapter.

The second part is an extension of the principal topics treated in the first. In half-year classes it may be used for excess-credit assignments for the better students in the class.

Special features of the course are the graphical illustrations of the solutions of simultaneous equations and the prominence given to the formula and verbal problems.

*Elementary Functions and Applications*² is a course intended for the Freshman year in college or the first year of the junior college. Teachers of secondary mathematics will find in this book an abundance of material which may be used with profit in the upper classes of the high school. Since the essentials of trigonometry, advanced algebra, analytic geometry, and calculus are treated in this book, it may be considered as general mathematics, and will be helpful to the general student as well as to those who expect to continue the study of mathematics.

¹ FLETCHER DURELL and E. E. ARNOLD, *A Second Book in Algebra*. New York: Charles E. Merrill Co., 1920. Pp. iv+330.

² ARTHUR SULLIVAN GALE and CHARLES WILLIAM WATKEYS, *Elementary Functions and Applications*. New York: Henry Holt & Co., 1920. Pp. xx+436.

The central topic is the study of functions, with graphical illustrations used freely. The elementary notions of calculus are introduced at the start and are used in the study of functions, giving the student a knowledge of the fundamental ideas of the derivative and the integral.

The book contains a brief chapter on statistical methods. Since these methods are being used more and more in many fields, the general college student should find this treatment of the topic helpful and valuable.

A new supplement to the Hillegas scale.—The feeling that perhaps the most valuable turn that can be given to the testing movement just at this time may be the improvement of existing tests by means of revisions and supplements is finding frequent expression in the test materials being presented. One such contribution¹ which will appear as the "Virginia Supplement to the Hillegas Scale" is the outgrowth of the Virginia School Survey. It is made up of compositions written by first-year high-school pupils of the state in May, 1919. The compositions from which the scale is selected were scored on the "Nassau County Supplement of the Hillegas Scale." The new scale is presented in pamphlet form, the booklet containing, in addition, a discussion of the purposes and methods of use of the scale and a number of samples for practice in scoring.

High-school statistics.—The administrative and financial problems arising from the maintenance of a free system of secondary schools in all the states are fast becoming so acute that any authentic figures with reference to conditions and tendencies in public high schools will be eagerly scanned by all who are sensitive to the present situation. One section² of the Biennial Survey of Education is devoted to a study of high schools and is published separately. The report describes the type and size of the schools considered, records the number of students, the percentage of the total population attending high schools, the amount of schooling provided, and various items of expense. A total of 13,951 high schools are included in this year's report, a gain of 1,948 over the number reported the previous year. Attention is called to the fact that the number of secondary schools being maintained at public expense is increasing so rapidly that one high school has been established on the average each day since 1890. It is further noted that the proportion of all moneys spent for permanent outlay which is devoted to high schools has increased from 27.7 per cent in 1910 to 33.4 per cent in 1918. As compared with elementary-school pupils, it costs 2.67 times as much to keep a high-school pupil in school for a year and 5.5 times as much to provide the necessary buildings and equipment. The report will be read with

¹ EARL HUDELSON, *Hudelson English Composition Scale*. Yonkers-on-Hudson, New York: World Book Co., 1921. Pp. vii+46. ✓

² "Statistics of Public High Schools, 1917-18," *Bureau of Education Bulletin No. 19, 1920*. Washington: Department of the Interior. Pp. 192. \$0.25.

interest by all those concerned with the promotion of public secondary education, since extension programs now being proposed before educational and legislative councils must of necessity justify themselves in the face of data such as these.

CURRENT PUBLICATIONS RECEIVED

GENERAL EDUCATIONAL METHOD, HISTORY, THEORY, AND PRACTICE

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- AVERILL, LAWRENCE A. *Psychology for Normal Schools*. Boston: Houghton Mifflin Co., 1921. Pp. xx+362. \$2.25.

BOOKS PRIMARILY FOR HIGH-SCHOOL TEACHERS AND PUPILS

- BRANDON, EDGAR EWING. *Series Lessons for Beginners in French. Part II*. Milwaukee: Modern Language Press, 1921. Pp. 122. \$0.75.
- CARRINGTON, HERBERT D., and HOLZWARTH, CHARLES. *German Composition*. Boston: D. C. Heath & Co., 1921. Pp. viii+138. \$1.12.
- D'OOGHE, BENJAMIN L. *Concise Latin Grammar*. Boston: Ginn & Co., 1921. Pp. xviii+410.
- Farina fra le corde d'un contrabasso*. Edited by ELSIE SCHOBINGER and ETHEL PRESTON. Chicago: University of Chicago Press, 1921. Pp. vii+122. \$1.50.
- LULL, HERBERT G., and WILSON, H. B. *The Redirection of High School Instruction*. Philadelphia: J. B. Lippincott Co., 1921. Pp. 286.
- SOLANO, MARIA. *Cuentos y lecturas en Castellano*. Boston: Silver, Burdett & Co., 1921. Pp. x+158.

MISCELLANEOUS PUBLICATIONS

- Mending and Repair of Books*. Chicago: American Library Association, 1921. Pp. 23.
- PAYNE, E. GEORGE. *Education in Accident Prevention*. Chicago: Lyons & Carnahan, 1919 [revised]. Pp. 176.
- Report of the United States Interdepartmental School Hygiene Board*. Washington: Government Printing Office, 1920. Pp. 272.
- The Booklist Books, 1920*. Chicago: American Library Association, 1920. Pp. 64.
- The Odyssey of Homer*. Translated by GEORGE HERBERT PALMER. Boston: Houghton Mifflin Co., 1921 [revised]. Pp. xxiv+402. \$1.12.
- The Subject Index to Periodicals. Section F. Education and Child Welfare*. London: The Library Association, 1921. Pp. 87.

